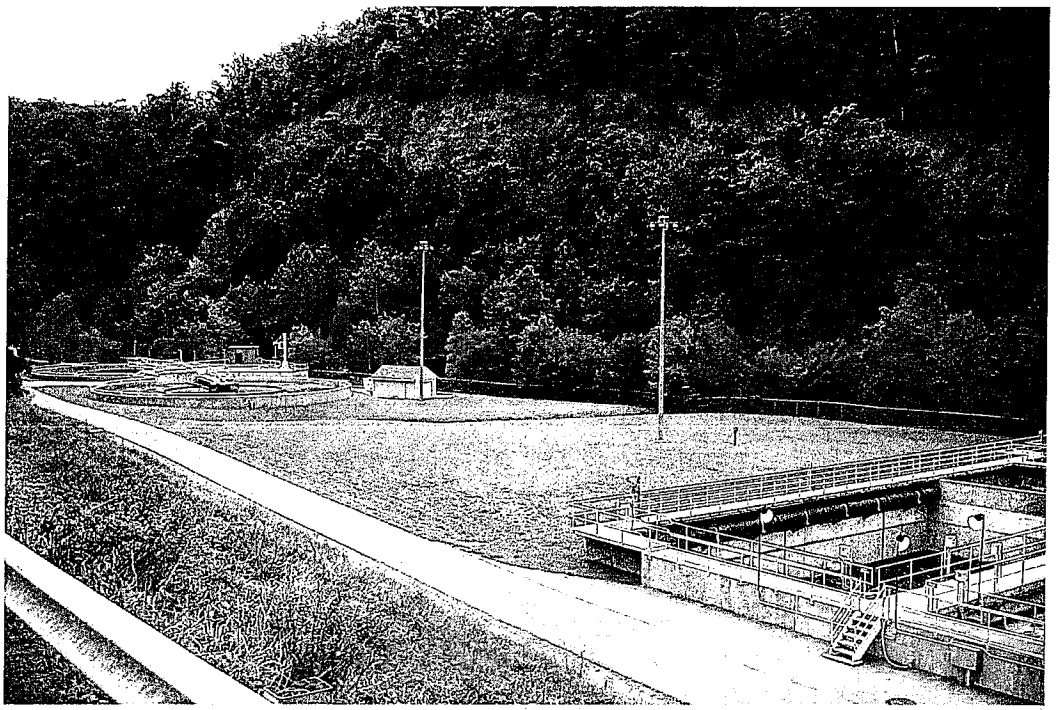
ORIGINAL

BLACKSBURG–VPI SANITATION AUTHORITY

LOWER STROUBLES CREEK WASTEWATER TREATMENT PLANT

VPDES Permit Reissuance Application

VPDES Permit No. VA0060844



Prepared for:

Blacksburg – VPI Sanitation Authority

P.O. Box 52

Blacksburg, VA 24060

Prepared by:

OLVER INCORPORATED

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October 7, 2008
Project Number 10729.03

FACILITY NAME AND PERMIT NUMBER:
Lower Stroubles Creek Wastewater Treatment Plant; VA0060844

Form Approved 1/14/99
OMB Number 2040-0086

FORM 2A NPDES

NPDES FORM 2A APPLICATON OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some appicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

A. **Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.

B. **Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.

C. **Certification.** All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

D. **Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to provide the information.

E. **Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):

1. Has a design flow rate greater than or equal to 1 mgd,
2. Is required to have a pretreatment program (or has one in place), or
3. Is otherwise required by the permitting authority to submit results of toxicity testing.

F. **Industrial Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastwater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:

1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
2. Any other industrial user that:
   a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions): or
   b. Contributes a process wastewater that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
   c. Is designed as an SIU by the control authority.

G. **Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1 Facilty Information.

Facilty Name	Lower Stroubles Creek Wastewater Treatment Plant
Mailing Address	P.O. Box 52
	Blacksburg, VA 24060
Contact Person	Michael Vaught
Title	Executive Director
Telephone Number	(540) 552-6940
Facilty Address	5277 Prices Fork Road
(not P.O. Box)	Blacksburg, VA 24060

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant Name	Blacksburg-VPI Sanitation Authority
Mailing Address	N/A - same as above
Contact Person	
Title	
Telephone number	

Is the applicant the owner or operator (or both) of the treatment works?

X owner X operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

X facility _____ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES	VA0060844	PSD	
UIC		Other	EPA Sludge VA L 060844
RCRA		Other	DEQ State Operating Air Permit 20911

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
Blacksburg	60,481	Separate	Municipal
Virginia Tech (on-campus)	9,092	Separate	State
Mongomery County PSA	1,500	Separate	Municipal

Total population served 71,073

A.5. Indian Country

a. Is the treatment works located in Indian Country?

____ Yes __X__ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

____ Yes __X__ No

A.6 Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years Each year's data must be based on a 12-month time period with the 12th month of "this year" ocurring no more than three months prior to this application submittal.

a. Design flow rate **9** mgd

	Two Years Ago **(9/05 - 8/06)**	Last Year **(9/06 - 8/07)**	This Year **(9/07 - 8/08)**	
b. Annual average daily flow rate	**5.4**	**5.5**	**4.8**	mgd
c. Maximum daily flow rate	**21.8**	**13.7**	**11.4**	mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

X Separate sanitary sewer	**100** %
____ Combined storm and sanitary sewer	**0** %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to the waters of the U.S.? **X** Yes ____ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent	**1**
ii. Discharges of untreated or partially treated effluent	**0**
iii. Combined sewer overflow points	**0**
iv. Constructed emergency overflows (prior to the headworks)	**1**
v. Other _____	**N/A**

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? ____ Yes **X** No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge ____ continuous or ____ intermittent?

c. Does the treatment works land-apply treated wastewater? ____ Yes **X** No

If yes, provide the following for each land application site:

Location: _____

Annual average daily volume applied to site: _____ mgd

Is land application ____ continuous or ____ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? ____ Yes **X** No

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

Transporter Name _____

Mailing Address _____

_____

Contact Person _____

Title _____

Telephone Number _____

For each treatment works that receives this discharge, provide the following:

Transporter Name _____

Mailing Address _____

_____

Contact Person _____

Title _____

Telephone Number _____

If known, provide the NPDES permit number of the treatment works that receives this discharge. _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____ mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not inclued in A.8.a through A.8.d above (e.g., underground percolation, well injection)? _____ Yes **X** No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

_____

Annual daily volume disposed of by this method: _____

Is disposal through this method _____ continuous or _____ intermittent?

WASTEWATER DISCHARGES

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. **If you answered "no" to question A.8.a,** go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9 Description of Outfall.

a. Outfall number **001**

b. Location

Blacksburg (City or town, if applicable)	**24060** (Zip Code)
Montomery (County)	**Virginia** (State)
37° 11' 29" N (Latitude)	**80° 31' 34" W** (Longitude)

c. Distance from shore (if applicable) **10** ft.

d. Depth below surface (if applicable) **0** ft.

e. Average daily flow rate **4.8** mgd **(September 2007- August 2008)**

f. Does this outfall have either an intermittent or periodic discharge? ____ Yes **X** No (go to A.9.g)

Number of times per year discharge occurs: ____

Average duration of each discharge: ____

Average flow per discharge: ____ mgd

Months in which discharge occurs: ____

g. Is outfall equipped with a diffuser? ____ Yes **X** No

A.10. Description of Receiving Waters

a. Name of receiving water **New River**

b. Name of watershed (if known) **New River Basin VAW-N22R**

United States Soil Conservation Service 14-digit watershed code (if known): ____

c. Name of State Management/River Basin (if known): **New River Basin**

United States Geological Survey 8-digit hydrological cataloging unit code (if known): ____

d. Critical low flow of receiving stream (if applicable):

acute **670** cfs (1Q10) chronic **865** cfs (7Q10)

e. Total hardness of receiving stream at critical low flow (if applicable): **123** mg/l of $CaCO_3$

A.11. Description of Treatment

a. What levels of treatment are provided? Check all that apply.

X Primary X Secondary

X Advanced _____ Other. Describe: _____

b. Indicate the following removal rates (as applicable)

Design BOD_5 removal or Design $CBOD_5$ removal	92	%
Design SS removal	92	%
Design P removal	N/A	%
Design N removal	38	%
Other N/A	N/A	%

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall? X Yes _____ No

d. Does the treatment plant have post aeration? X Yes _____ No

A.12.

Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001 * Data from DMRs (September 2005 - August 2008)

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)*	6.4	s.u.			
pH (Maximum)*	7.4	s.u.			
Flow Rate*	21.8	MGD	5.2	MGD	Continuous
Temperature (Winter)	63	°F	56.3	°F	181
Temperature (Summer)	76	°F	72.3	°F	186

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
		Conc.	Units	Conc.	Units	Number of Samples		
BIOCHEMICAL OXYGEN*	BOD-5	11.5	mg/L	3.1	mg/L	144	EPA 405.1	1 mg/L
Demand (Report one)	CBOD-5	NA	NA	NA	NA	NA	NA	NA
FECAL COLIFORM		4	MPN/100 mls	< 2	MPN/100 mls	3	SM 9221 C, E	1 MPN/100 mLs
TOTAL SUSPENDED SOLIDS (TSS)*		24.0	mg/L	3.3	mg/L	720	EPA 160.2	2 mg/L

END OF PART A.
REFER TO THE APPLICATION OVERFIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. **If you answered "no" to question A.8.a**, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9 Description of Outfall.

a. Outfall number **002 (Bypass)**

b. Location **Blacksburg** (City or town, if applicable) **24060** (Zip Code)

Montgomery (County) **Virginia** (State)

37° 11' 29" N (Latitude) **80° 31' 34" W** (Longitude)

c. Distance from shore (if applicable) **10** ft.

d. Depth below surface (if applicable) **0** ft.

e. Average daily flow rate **0** mgd

f. Does this outfall have either an intermittent or periodic discharge? **X** Yes _____ No (go to A.9.g)

Number of times per year discharge occurs: **0 - The bypass will only be used for emergency; there have been no bypasses to date**

Average duration of each discharge: _____

Average flow per discharge: _____ mgd

Months in which discharge occurs: _____

g. Is outfall equipped with a diffuser? _____ Yes **X** No

A.10. Description of Receiving Waters

a. Name of receiving water **New River**

b. Name of watershed (if known) **New River Basin VAW-N22R**

United States Soil Conservation Service 14-digit wastershed code (if known): _____

c. Name of State Management/River Basin (if known): **New River Basin**

United States Geological Survey 8-digit hydrological cataloging unit code (if known): _____

d. Critical low flow of receiving stream (if applicable):

acute **670** cfs (1Q10) chronic **865** cfs (7Q10)

e. Total hardness of receiving stream at critical low flow (if applicable): **123** mg/l of $CaCO_3$

A.11. Description of Treatment

a. What levels of treatment are provided? Check all that apply.

_____ Primary _____ Secondary

_____ Advanced X Other. Describe: Chlorination

b. Indicate the following removal rates (as applicable)

Design BOD_5 removal or Design $CBOD_5$ removal	0 %
Design SS removal	0 %
Design P removal	0 %
Design N removal	0 %
Other _____	N/A %

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall? _____ Yes X No

d. Does the treatment plant have post aeration? X Yes _____ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 002 (Bypass) No discharge to date.

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	N/A	s.u.			
pH (Maximum)	N/A	s.u.			
Flow Rate	N/A	N/A	N/A	N/A	N/A
Temerature (Winter)	N/A	N/A	N/A	N/A	N/A
Temerature (Summer)	N/A	N/A	N/A	N/A	N/A

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
		Conc.	Units	Conc.	Units	Number of Samples		
BIOCHEMICAL OXYGEN	BOD-5	N/A	N/A	N/A	N/A	0	N/A	N/A
Demand (Report one)	CBOD-5	N/A	N/A	N/A	N/A	0	N/A	N/A
FECAL COLIFORM		N/A	N/A	N/A	N/A	0	N/A	N/A
TOTAL SUSPENDED SOLIDS (TSS)		N/A	N/A	N/A	N/A	0	N/A	N/A

END OF PART A.
REFER TO THE APPLICATION OVERFIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.
estimated: < 200,000 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.
The Town of Blacksburg, VPI, and the Authority have ongoing collection system operations and maintenance programs to address inflow and infiltration.

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.) **See attached Site Location Map**

a. The area surrounding the treatment plant, including all unit processes.
b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is descharged from the treatment plant. Include outfalls from bypass piping, if applicable.
c. Each well where wastewater from the treatment plant is injected underground.
d. Well, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, ncluding all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.
See attached Flow Schematic

B.4. Operation/Maintenance Performed by Contractor(s).
Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?

____ Yes _X_ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

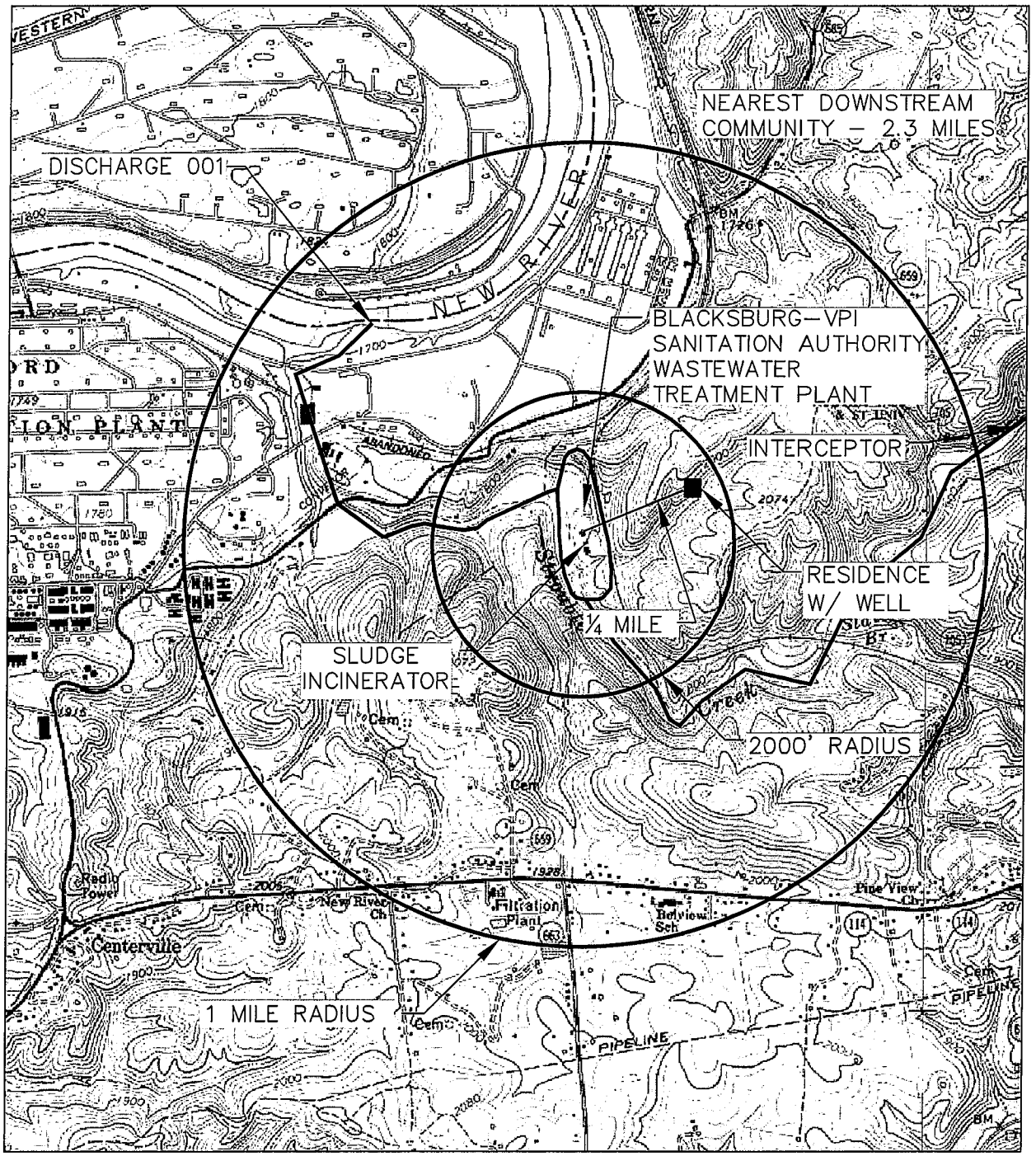
Name: _____
Mailing Address: _____
_____
Telephone Number: _____
Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatement, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.) **N/A**

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

_____

b. Indicate whether the planned improvements or implementation schedule ar required by local, State, or Federal agencies.
____ Yes ____ No



MAP TAKEN FROM NATIONAL GEOGRAPHIC TOPO, BLACKSBURG, VIRGINIA

BLACKSBURG – VPI SANITATION AUTHORITY
VPDES PERMIT APPLICATION – FORM 2A
SITE LOCATION MAP

FIGURE 1

SCALE: 1=2000'
JOB NO.:10729.03

SEPT 2008
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OLVER INCORPORATED

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c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

_____

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM/DD/YYYY	Actual Completion MM/DD/YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? _____ Yes _____ No
Describe briefly: _____

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: **001**

***TRC values based on Maximum Weekly Average and Maximum Monthly Average Values reported on DMRs**
****Dissolved Oxygen values based on Minimum Monthly Values reported on DMRs**
(DMR period 9/05-8/08)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.											
AMMONIA (as N)	<0.2	mg/L	<8.6	kg/d	<0.2	mg/L	<3.6	kg/d	3	EPA 350.1	0.2 mg/L
CHLORINE (TOTAL RESIDUAL, TRC) *	12	µg/L	314	g/d	1.4	µg/L	27.6	g/d	13,152	EPA 330.1	0.1 mg/L
DISSOLVED OXYGEN **	9	mg/L	299	kg/d	7.6	mg/L	150	kg/d	1,096	EPA 360.1	1.0 mg/L
TOTAL KJELDAHL NITROGEN (TKN)	1.2	mg/L	51.8	kg/d	1.1	mg/L	20	kg/d	3	EPA 350.1	0.2 mg/L
NITRATE PLUS NITRITE NITROGEN	22.3	mg/L	962	kg/d	12.6	mg/L	229	kg/d	3	SM 18/4500 NO3F	0.1 mg/L
OIL and GREASE	<10	mg/L	<432	kg/d	<10	mg/L	<182	kg/d	3	EPA 1664 A	10 mg/L
PHOSPHORUS (Total)	3.18	mg/L	137	kg/d	3.1	mg/L	56	kg/d	3	SM 18/ 4500-P E	0.05 mg/L
TOTAL DISSOLVED SOLIDS (TDS)	328	mg/L	14,200	kg/d	315	mg/L	5,720	kg/d	3	SM 18/ 2540 C	10 mg/L
OTHER											

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:
Lower Stroubles Creek Wastewater Treatment Plant; VA0060844

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

X Basic Application Information packet

Supplemental Application Information packet

X Part D (Expanded Effluent Testing Data)

X Part E (Toxicity Testing: Biomonitoring Data)

X Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

____ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION

I certifiy under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, inlcluding the possibility of fine and imprisonment for knowing violations.

Name and official title: **Michael Vaught, Executive Director**

Signature: Michael E. Vaught

Telephone number: **(540) 552-6940**

Date signed: 10/06/2008

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: **001** (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY	<100	µg/L	<4,320	g/d	<100	µg/L	<1,820	g/d	3	EPA 200.7	100 µg/L
ARSENIC	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 200.7	10 µg/L
BERYLLIUM	**Waiver Requested**										
CADMIUM	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 200.7	10 µg/L
CHROMIUM	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 200.7	10 µg/L
COPPER	13	µg/L	560	g/d	<11	µg/L	<200	g/d	3	EPA 200.7	10 µg/L
LEAD	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 200.7	10 µg/L
MERCURY	<0.2	µg/L	<8.6	g/d	<0.2	µg/L	<3.6	g/d	3	EPA 245.1	0.2 µg/L
NICKEL	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 200.7	10 µg/L
SELENIUM	<50	µg/L	<2,160	g/d	<50	µg/L	<908	g/d	3	EPA 200.7	50 µg/L
SILVER	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 200.7	10 µg/L
THALLIUM	**Waiver Requested**										
ZINC	55	µg/L	2,370	g/d	43	µg/L	781	g/d	3	EPA 200.7	10 µg/L
CYANIDE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 335.2	10 µg/L
TOTAL PHENOLIC COMPOUNDS	**Waiver Requested**										
HARDNESS (AS $CaCO_3$)	140	mg/L	6,040	kg/d	127	mg/L	2,310	kg/d	3	EPA 130.2	1 mg/L
Use this space (or a separate sheet to provide information on other base-neutral compounds requested by the permit writer.											

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
ACRYLONITRILE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
BENZENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
BROMOFORM	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
CARBON TETRACHLORIDE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
CHLOROBENZENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
CHLORODIBROMO-METHANE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
CHLOROETHANE	Waiver Requested										
2-CHLORO-ETHYLVINYL ETHER	Waiver Requested										
CHLOROFORM	43.6	µg/L	1,880	g/d	25.8	µg/L	469	g/d	3	EPA 624	10 µg/L
DICHLOROBROMO-METHANE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
1,1-DICHLOROETHANE	Waiver Requested										
1,2-DICHLOROETHANE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
TRANS-1,2-DICHLORO-ETHYLENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
1,1-DICHLOROETHYLENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
1,2-DICHLOROPROPANE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
1,3-DICHLORO-PROPYLENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
ETHYLBENZENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
METHYL BROMIDE	< 10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
METHYL CHLORIDE	Waiver Requested										
METHYLENE CHLORIDE	<20	µg/L	<863	g/d	<20	µg/L	<364	g/d	3	EPA 624	20 µg/L
1,1,2,2-TETRACHLORO-ETHANE	Waiver Requested										
TETRACHLORO-ETHYLENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
TOLUENE	< 10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE	**Waiver Requested**										
1,1,2-TRICHLOROETHANE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
TRICHLORETHYLENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
VINYL CHLORIDE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 624	10 µg/L
Use this space (or a separate sheet) to provide information on other volativel organic compounds requested by the permit writer.											
ACID-EXTRACTABLE COMPOUNDS											
P-CHLORO-M-CRESOL	**Waiver Requested**										
2-CHLOROPHENOL	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
2,4-DIMETHYLPHENOL	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
4,6-DINITRO-O-CRESOL	**Waiver Requested**										
2,4-DINITROPHENOL	<50	µg/L	<2,160	g/d	<50	µg/L	<908	g/d	3	EPA 625	50 µg/L
2-NITROPHENOL	**Waiver Requested**										
4-NITROPHENOL	**Waiver Requested**										
PENTACHLOROPHENOL	<20	µg/L	<863	g/d	<20	µg/L	<364	g/d	3	EPA 625	20 µg/L
PHENOL	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
2,4,6-TRICHLOROPHENOL	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.											
BASE-NEUTRAL COMPOUNDS.											
ACENAPHTHENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
ACENAPHTHYLENE	**Waiver Requested**										
ANTHRACENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
BENZIDINE	<50	µg/L	<2,160	g/d	<50	µg/L	<908	g/d	3	EPA 625	50 µg/L
BENZO(A)ANTHRACENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
BENZO(A)PYRENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L

FACILITY NAME AND PERMIT NUMBER:
Lower Stroubles Creek Wastewater Treatment Plant; VA0060844

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE	**Waiver Requested**										
BENZO(GHI)PERYLENE	**Waiver Requested**										
BENZO(K)FLUORANTHENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
BIS (2-CHLOROETHOXY) METHANE	**Waiver Requested**										
BIS (2-CHLOROETHYL)-ETHER	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
BIS (2-CHLOROISO-PROPYL) ETHER	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
BIS (2-ETHYLHEXYL) PHTHALATE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
4-BROMOPHENYL PHENYL ETHER	**Waiver Requested**										
BUTYL BENZYL PHTHALATE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
2-CHLORONAPHTHALENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
4-CHLORPHENYL PHENYL ETHER	**Waiver Requested**										
CHRYSENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
DI-N-BUTYL PHTHALATE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
DI-N-OCTYL PHTHALATE	**Waiver Requested**										
DIBENZO(A,H) ANTHRACENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
1,2-DICHLOROBENZENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
1,3-DICHLOROBENZENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
1,4-DICHLOROBENZENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
3,3-DICHLOROBENZIDINE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
DIETHYL PHTHALATE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
DIMETHYL PHTHALATE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
2,4-DINITROTOLUENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
2,6-DINITROTOLUENE	**Waiver Requested**										
1,2-DIPHENYLHYDRAZINE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L

FACILITY NAME AND PERMIT NUMBER:
Lower Stroubles Creek Wastewater Treatment Plant; VA0060844

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: **001** (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
FLUORENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
HEXACHLOROBENZENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
HEXACHLOROBUTADIENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
HEXACHLOROCYCLO-PENTADIENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
HEXACHLOROETHANE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
INDENO(1,2,3-CD)PYRENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
ISOPHORONE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
NAPHTHALENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
NITROBENZENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
N-NITROSODI-N-PROPYLAMINE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
N-NITROSODI-PHENYLAMINE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
PHENANTHRENE	**Waiver Requested**										
PYRENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L
1,2,4-TRICHLOROBENZENE	<10	µg/L	<432	g/d	<10	µg/L	<182	g/d	3	EPA 625	10 µg/L

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

END OF PART D.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combinded sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitorng data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

4 chronic 4 acute

E.2. **Individual Test Data.** Complete the following chart for each whole effluent toxicity test conducted in the last four and on-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

	Test number:_____	Test number:_____	Test number:_____
a. Test information. **See Part E.4.**			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			
b. Give toxicity test methods followed.			
Manual title			
Edition number and year of publication			
Page number(s)			
c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.			
24-Hour composite			
Grab			
d.. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection			
After dechlorination			

	Test number:_____	Test number:_____	Test number:_____
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:			
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specifiy source.			
Laboratory water			
Receiving water			
i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water			
Salt Water			
j. Give the percentage effluent used for all concentrations in the test series			
k. Parameters measured during the test. (State whether parameter meets test methods specifications)			
pH			
Salinity			
Temperature			
Ammonia			
Dissolved oxygen			
l. Test Results			
Acute:			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

Chronic			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			
m. Quality Control/Quality Assurance			
Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

_____Yes __X__ No If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Text Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

See attached sheet that shows summary of reports that were previously submitted.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)
See attached sheet that provides a summary of test results.

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

Blacksburg-VPI Sanitation Authority
VA0060844
E.4. Summary of Submitted Biomonitoring Test Information
Outfall 001

Event	Dates	Vertebrate	Invertebrate	LC_{50} (%)	NOEC (%)	Survival in 100%
Annual	10/21-10/23/04		X	>100%		100%
	10/19-1026/04	X			100%	100%
Annual	10/12-10/14/05		X	>100%		100%
	10/11-10/18/05	X			100%	100%
Annual	9/27-9/29/06		X	>100%		100%
	9/25-10/2/06	X			100%	100%
Annual	11/1-11/3/07		X	>100%		100%
	10/9-10/16/07	X			100%	100%

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. **Pretreatment Program.** Does the treatment works have, or is it subject to, an approved pretreatment program?

X Yes _____ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 1 * currently discharges via VPDES Permit

b. Number of CIUs. 4

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. **Significant Industrial User Information.** Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Federal Mogul Corporation

Mailing Address: Rt. 460 South Main Street
Blacksburg, VA 24060

F.4. **Industrial Processes.** Describe all of the industrial processes that affect or contribute to the SIU's discharge.

SIC Code 3568 - Forming and plating metal parts (bearings) for automotive industry

F.5. **Principal Product(s) and Raw Material(s).** Describe all of the pincipal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): Motor parts and accessories

Raw material(s): Steel and other metal components

F.6. **Flow Rate.**

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

23,000 gpd (_____continuous or X intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

6,560 gpd (X continuous or _____ intermittent)

F.7. **Pretreatment Standards.** Indicate whether the SIU is subject to the following:

a. Local limits X Yes _____ No

b. Categorical pretreatment standards X Yes _____ No

If subject to categorical pretreatment standards, which category and subcategory?

Electroplating; Subpart A (Common Metals) 40 CFR 413

F.8. **Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____ Yes _X_ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. **RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?

____ Yes _X_ No (go to F.12.)

F.10. **Waste Transport.** Method by which RCRA waste is received (check all that apply):

____ Truck ____ Rail ____ Dedicated Pipe

F.11. **Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. **Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

_X_ Yes (complete F.13 through F.15.) ____ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. **Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

Federal Mogul Corporation - RCRA groundwater remediation - currently discharges via VPDES permit but facility has retained an indirect discharge permit for possible future use

F.14. **Pollutants.** List the hazardous constituents that are received (or are expected to received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

Federal Mogul Corporation - Trichloroethylene; concentration typically < 5 ug/L.

F.15. **Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

_X_ Yes ____ No

If yes, describe the treatment (provide information about the removal efficiency):

Federal Mogul Corporation - Activated carbon treatment system

b. Is the discharge (or will the discharge be) continuous or intermittent?

____ Continuous _X_ Intermittent If intermittent, describe discharge schedule.

Discharge based on groundwater levels and pump activation.

END OF PART F
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. **Pretreatment Program.** Does the treatment works have, or is it subject to, an approved pretreatment program?

X Yes _____ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 1 * **currently discharges via VPDES Permit**

b. Number of CIUs. 4

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. **Significant Industrial User Information.** Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Nuvotronics, LLC

Mailing Address: 3150 State Street
Blacksburg, VA 24060

F.4. **Industrial Processes.** Describe all of the industrial processes that affect or contribute to the SIU's discharge.

Develops and manufactures advanced microelectronic and optical components

F.5. **Principal Product(s) and Raw Material(s).** Describe all of the pincipal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): Various microelectronic and optical components

Raw material(s): Optical fibers, silicon wafers

F.6. **Flow Rate.**

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

5,620 gpd (_____continuous or X intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

1,000 gpd (_____continuous or _____ intermittent)

F.7. **Pretreatment Standards.** Indicate whether the SIU is subject to the following:

a. Local limits X Yes _____ No

b. Categorical pretreatment standards X Yes _____ No

If subject to categorical pretreatment standards, which category and subcategory?

Electrical and Electronic Components; Subpart A (Semiconductor subcategory) 40 CFR 469

F.8. **Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____ Yes __X__ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. **RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?

____ Yes __X__ No (go to F.12.)

F.10. **Waste Transport.** Method by which RCRA waste is received (check all that apply):

____ Truck ____ Rail ____ Dedicated Pipe

F.11. **Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. **Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

__X__ Yes (complete F.13 through F.15.) ____ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. **Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

Federal Mogul Corporation - RCRA groundwater remediation - currently discharges via VPDES permit but facility has retained an indirect discharge permit for possible future use

F.14. **Pollutants.** List the hazardous constituents that are received (or are expected to received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

Federal Mogul Corporation - Trichloroethylene; concentration typically < 5 ug/L.

F.15. **Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

__X__ Yes ____ No

If yes, describe the treatment (provide information about the removal efficiency):

Federal Mogul Corporation - Activated carbon treatment system

b. Is the discharge (or will the discharge be) continuous or intermittent?

____ Continuous __X__ Intermittent If intermittent, describe discharge schedule.

Discharge based on groundwater levels and pump activation.

END OF PART F
REFER TO THE APPLICATION OVERFIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. **Pretreatment Program.** Does the treatment works have, or is it subject to, an approved pretreatment program?

X Yes _____ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 1 * currently discharges via VPDES Permit

b. Number of CIUs. 4

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. **Significant Industrial User Information.** Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Wolverine Gasket Company - Cedar Run Plant

Mailing Address: 210 Industrial Park Road, SW
Blacksburg, VA 24060

F.4. **Industrial Processes.** Describe all of the industrial processes that affect or contribute to the SIU's discharge.

SIC Codes 3053 and 3479 - Production of gaskets for automotive industry

F.5. **Principal Product(s) and Raw Material(s).** Describe all of the pincipal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): Rubber Coated Steel Coil

Raw material(s): Steel, stainless steel and aluminum coils; nitrile butadiene rubber

F.6. **Flow Rate.**

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

5,000 gpd (_____ continuous or X intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

1,360 gpd (X continuous or _____ intermittent)

F.7. **Pretreatment Standards.** Indicate whether the SIU is subject to the following:

a. Local limits X Yes _____ No

b. Categorical pretreatment standards X Yes _____ No

If subject to categorical pretreatment standards, which category and subcategory?

Coil Coating; Subcategory A (Steel Basis) and Subcategory C (Aluminum Basis) 40 CFR 465

F.8. **Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____ Yes __X__ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. **RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?

____ Yes __X__ No (go to F.12.)

F.10. **Waste Transport.** Method by which RCRA waste is received (check all that apply):

____ Truck ____ Rail ____ Dedicated Pipe

F.11. **Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. **Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

__X__ Yes (complete F.13 through F.15.) ____ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. **Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

Federal Mogul Corporation - RCRA groundwater remediation - currently discharges via VPDES permit but facility has retained an indirect discharge permit for possible future use

F.14. **Pollutants.** List the hazardous constituents that are received (or are expected to received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

Federal Mogul Corporation - Trichloroethylene; concentration typically < 5 ug/L.

F.15. **Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

__X__ Yes ____ No

If yes, describe the treatment (provide information about the removal efficiency):

Federal Mogul Corporation - Activated carbon treatment system

b. Is the discharge (or will the discharge be) continuous or intermittent?

____ Continuous __X__ Intermittent If intermittent, describe discharge schedule.

Discharge based on groundwater levels and pump activation.

END OF PART F
REFER TO THE APPLICATION OVERFIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. **Pretreatment Program.** Does the treatment works have, or is it subject to, an approved pretreatment program?

X Yes _____ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 1 * **currently discharges via VPDES Permit**

b. Number of CIUs. 4

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. **Significant Industrial User Information.** Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: **Wolverine Gasket Company - Blacksburg Plant**

Mailing Address: **210 Industrial Park Road, SW**
Blacksburg, VA 24060

F.4. **Industrial Processes.** Describe all of the industrial processes that affect or contribute to the SIU's discharge.

SIC Codes 3053 and 3479 - Production of gaskets for the automotive industry

F.5. **Principal Product(s) and Raw Material(s).** Describe all of the pincipal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): **Rubber coated steel coil**

Raw material(s): **Steel, stainless steel and aluminum coils; nitrile butadiene rubber**

F.6. **Flow Rate.**

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

5,000 gpd (_____continuous or X intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

1,360 gpd (X continuous or _____ intermittent)

F.7. **Pretreatment Standards.** Indicate whether the SIU is subject to the following:

a. Local limits X Yes _____ No

b. Categorical pretreatment standards _____ Yes X No

If subject to categorical pretreatment standards, which category and subcategory?

Coil Coating; Subcategory A (Steel Basis) and Subcategory C (Aluminum Basis) 40 CFR 465

F.8. **Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____ Yes __X__ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. **RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?

____ Yes __X__ No (go to F.12.)

F.10. **Waste Transport.** Method by which RCRA waste is received (check all that apply):

____ Truck ____ Rail ____ Dedicated Pipe

F.11. **Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. **Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

__X__ Yes (complete F.13 through F.15.) ____ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. **Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

Federal Mogul Corporation - RCRA groundwater remediation - currently discharges via VPDES permit but facility has retained an indirect discharge permit for possible future use

F.14. **Pollutants.** List the hazardous constituents that are received (or are expected to received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

Federal Mogul Corporation - Trichloroethylene; concentration typically < 5 ug/L.

F.15. **Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

__X__ Yes ____ No

If yes, describe the treatment (provide information about the removal efficiency):

Federal Mogul Corporation - Activated carbon treatment system

b. Is the discharge (or will the discharge be) continuous or intermittent?

____ Continuous __X__ Intermittent If intermittent, describe discharge schedule.

Discharge based on groundwater levels and pump activation.

END OF PART F
REFER TO THE APPLICATION OVERFIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. **Pretreatment Program.** Does the treatment works have, or is it subject to, an approved pretreatment program?

__X__ Yes _____ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. **1** *** currently discharges via VPDES Permit**

b. Number of CIUs. **4**

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. **Significant Industrial User Information.** Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: **Federal Mogul Corporation (Currently discharges via a VPDES permit but also holds a a permit for a possible future discharge to BVPISA)**

Mailing Address: **Rt 460 - South Main Street**
Blacksburg, VA 24060

F.4. **Industrial Processes.** Describe all of the industrial processes that affect or contribute to the SIU's discharge.

Groundwater remediation system

F.5. **Principal Product(s) and Raw Material(s).** Describe all of the pincipal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): **Trichloroethylene remediation treatment system**

Raw material(s): **N/A**

F.6. **Flow Rate.**

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

varies gpd (_____continuous or **X** intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

N/A gpd (_____continuous or _____ intermittent)

F.7. **Pretreatment Standards.** Indicate whether the SIU is subject to the following:

a. Local limits **X** Yes _____ No

b. Categorical pretreatment standards _____ Yes **X** No

If subject to categorical pretreatment standards, which category and subcategory?

F.8. **Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____ Yes __X__ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. **RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?

____ Yes __X__ No (go to F.12.)

F.10. **Waste Transport.** Method by which RCRA waste is received (check all that apply):

____ Truck ____ Rail ____ Dedicated Pipe

F.11. **Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. **Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

__X__ Yes (complete F.13 through F.15.) ____ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. **Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

Federal Mogul Corporation - RCRA groundwater remediation - currently discharges via VPDES permit but facility has retained an indirect discharge permit for possible future use

F.14. **Pollutants.** List the hazardous constituents that are received (or are expected to received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

Federal Mogul Corporation - Trichloroethylene; concentration typically < 5 ug/L.

F.15. **Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

__X__ Yes ____ No

If yes, describe the treatment (provide information about the removal efficiency):

Federal Mogul Corporation - Activated carbon treatment system

b. Is the discharge (or will the discharge be) continuous or intermittent?

____ Continuous __X__ Intermittent If intermittent, describe discharge schedule.

Discharge based on groundwater levels and pump activation.

END OF PART F

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

EPA I.D. Number *(copy from Item 1 of Form 1)*

VA0060844

Please print or type in the unshaded areas only.

Form Approved.
OMB No. 2040-0086.
Approval expires 8-31-98.

Form **2F** NPDES

United States Environmental Protection Agency
Washington, DC 20460

Application for Permit To Discharge Stormwater Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number *(list)*	B. Latitude			C. Longitude			D. Receiving Water *(name)*
003	37°	10'	53"	80°	30'	54"	Stroubles Creek
004	37°	10'	53"	80°	30'	55"	Stroubles Creek
005	37°	10'	54"	80°	30'	55"	Stroubles Creek
006	37°	10'	57"	80°	30'	58"	Stroubles Creek
007	37°	11'	5"	80°	31'	00"	Stroubles Creek

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

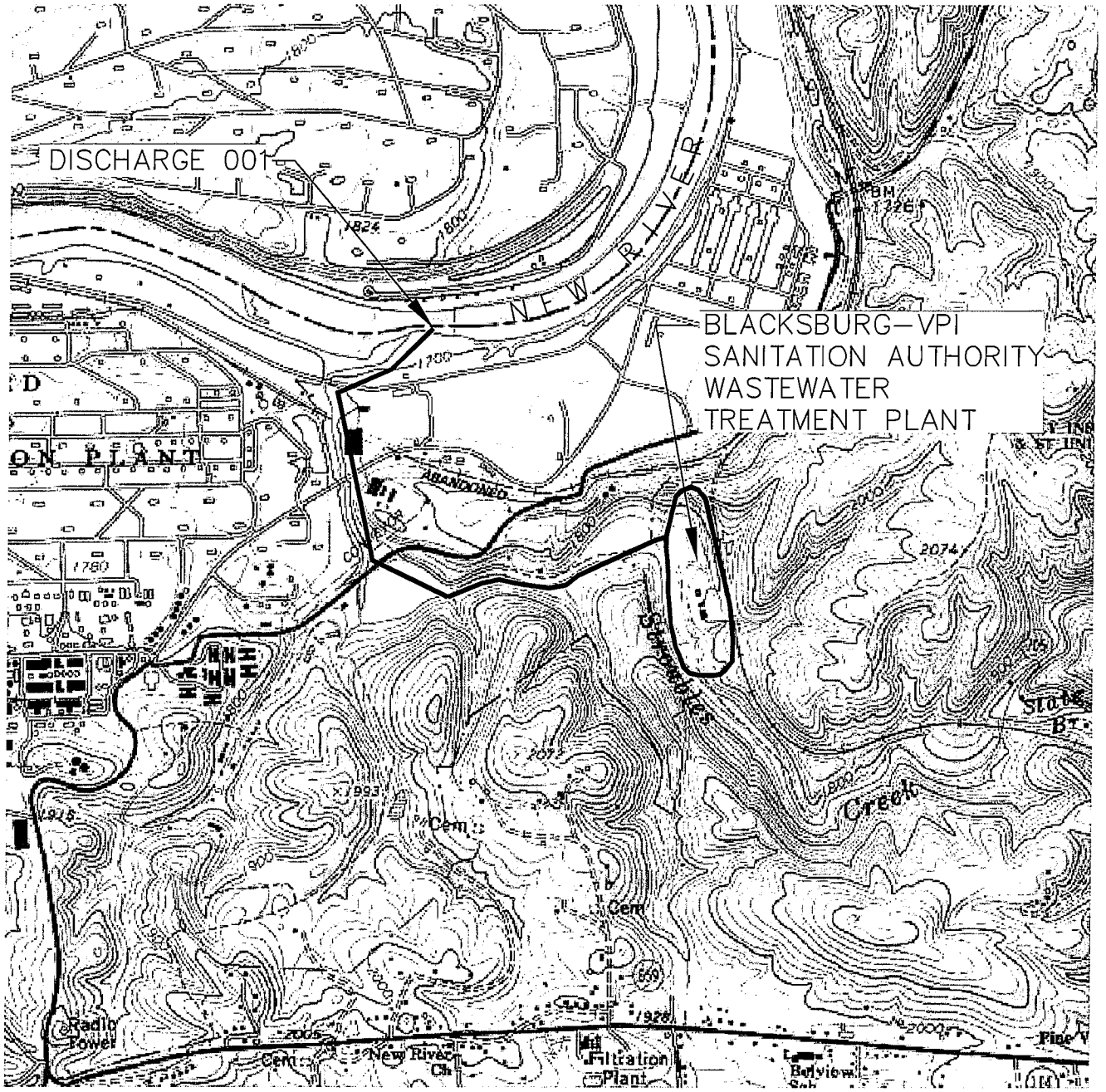
1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
N/A - None					

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each know past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

See Attached Site Location and Facility Site Maps



MAP TAKEN FROM U.S.G.S. TOPO: RADFORD NORTH AND BLACKSBURG, VA. QUADS.

STORMWATER POLLUTION PREVENTION PLAN
BLACKBURG – VPI SANITATION AUTHORITY
SITE LOCATION MAP

SCALE: 1"=2000'–0"
JOB NO.: 10729.04

SEPT 2008
App_2003108.zip

OLVER INCORPORATED

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Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface *(provide units)*	Total Area Drained *(provide units)*	Outfall Number	Area of Impervious Surface *(provide units)*	Total Area Drained *(provide units)*
003	4,890	118,794 ft^2	006	65,280	593,128 ft^2
004	7,310	14,324 ft^2	007	99,320	1,117,482 ft^2
005	3,375	26,774 ft^2			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed, in the last three years, to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

Materials exposed to storm water include the grit screenings/solids handling and storage areas, which are at least partially covered, a 5,155 gallon and two 9,816 gallon double-walled oil storage tanks, and loading dock areas, that are concrete. A BVPISA employee is present for loadings at the leachate receiving station and two BVPISA employees are present for oil unloading activities. A herbicide is applied periodically during the growing season to the site perimeter fence to prevent/reduce plant growth; these applications are performed by a BVPISA employee certified for herbicide use.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
All five outfalls	Natural drainage ways, rip-rap ditches, pipes and concrete V and trapeziodal ditches collect and convey site drainage away from potential sources of pollution.	None

V. Nonstormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharges from these outfall(s)) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name and Official Title *(type or print)*	Signature	Date Signed
Michael Vaught, Executive Director	Michael E. Vaught	10/06/2008

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test

Dry weather flows for the facility were observed visually.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

There have been no significant leaks or spills of toxic or hazardous pollutants at the facility in the past three years.

EPA I.D. Number *(copy from Item 1 of Form 1)*

VA0060844

Continued from Page 2

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables VII-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E. Potential discharges not covered by analysis-is any pollutant listed in Table 2F-2 a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

[ ] Yes *(list all such pollutants below)* [X] No *(go to section VIII)*

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

[ ] Yes *(list results below)* [X] No *(go to Section IX)*

IX. Contract Analysis Information

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

[X] Yes *(list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)* [ ] No *(go to Section X)*

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Air Water & Soil Laboratories, Inc.	**2109 A North Hamilton St. Richmond, VA 23230**	**(804) 358-8295**	**All parameters except Chlorine and pH**

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title *(type or print)*	B. Area Code and Phone No.
Michael Vaught, Executive Director	**(540) 552-6940**
C. Signature	D. Date Signed
Michael E. Vaught	10/06/2008

EPA ID Number *(copy from Item 1 of Form 1)*

VA0060844

Form Approved.
OMB No. 2040-0086.
Approval expires 8-31-98.

VII. Discharge Information *(Continued form page 3 of Form 2F)*

Part A- You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	**Outfall 003** Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil and Grease	**<10 mg/L**	**N/A**	**<10 mg/L**	**N/A**	**1**	**Storm Water Runoff**
Biological Oxygen Demand (BOD5)	**<2 mg/L**	**<2 mg/L**	**<2 mg/L**	**<2 mg/L**	**1**	**Storm Water Runoff**
Chemical Oxygen Demand (COD)	**11.4 mg/L**	**<10 mg/L**	**11.4 mg/L**	**<10 mg/L**	**1**	**Storm Water Runoff**
Total Suspended Solids (TSS)	**5.4 mg/L**	**15.6 mg/L**	**5.4 mg/L**	**15.6 mg/L**	**1**	**Storm Water Runoff**
Total Kjeldahl Nitrogen	**0.3 mg/L**	**0.4 mg/L**	**0.3 mg/L**	**0.4 mg/L**	**1**	**Storm Water Runoff**
Nitrate plus Nitrite Nitrogen	**<0.1 mg/L**	**<0.1 mg/L**	**<0.1 mg/L**	**<0.1 mg/L**	**1**	**Storm Water Runoff**
Total Phosphorus	**0.07 mg/L**	**0.08 mg/L**	**0.07 mg/L**	**0.08 mg/L**	**1**	**Storm Water Runoff**
pH	Minimum **7.8 S.U.**	Maximum **7.8 S.U.**	Minimum **7.8 S.U.**	Maximum **7.8 S.U.**	**1**	**Storm Water Runoff**

Part B- List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under and existing NPDES permit). Complete one t

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
TRC	**<0.1 mg/L**	**N/A**	**<0.1 mg/L**	**N/A**	**1**	**Storm Water Runoff**

Continued from the Front

Part C- List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Outfall 003

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
N/A						

Part D- Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*	7. Season sample was taken	8. Form of Precipitation *(rainfall, snowmelt)*
8/26/2008	2,160 minutes	1.12"	~294 hours	N/A*	N/A*	Summer	Rain

9. Provide a description of the method of flow measurement or estimate

*Outfall 003 was deemed substantially similar to Outfall 005 by DEQ letter dated September 10, 2003. As such, data from Outfall 005 monitoring was reported for this outfall. Flow measurements were not made for this outfall.

EPA ID Number *(copy from Item 1 of Form 1)*

VA0060844

Form Approved.
OMB No. 2040-0086.
Approval expires 8-31-98.

VII. Discharge Information *(Continued form page 3 of Form 2F)*

Part A- You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	**Outfall 004**
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		Sources of Pollutants
Oil and Grease	**<10 mg/L**	**N/A**	**<10 mg/L**	**N/A**	**1**	**Storm Water Runoff**
Biological Oxygen Demand (BOD5)	**<2 mg/L**	**<2 mg/L**	**<2 mg/L**	**<2 mg/L**	**1**	**Storm Water Runoff**
Chemical Oxygen Demand (COD)	**11.4 mg/L**	**<10 mg/L**	**11.4 mg/L**	**<10 mg/L**	**1**	**Storm Water Runoff**
Total Suspended Solids (TSS)	**5.4 mg/L**	**15.6 mg/L**	**5.4 mg/L**	**15.6 mg/L**	**1**	**Storm Water Runoff**
Total Kjeldahl Nitrogen	**0.3 mg/L**	**0.4 mg/L**	**0.3 mg/L**	**0.4 mg/L**	**1**	**Storm Water Runoff**
Nitrate plus Nitrite Nitrogen	**<0.1 mg/L**	**<0.1 mg/L**	**<0.1 mg/L**	**<0.1 mg/L**	**1**	**Storm Water Runoff**
Total Phosphorus	**0.07 mg/L**	**0.08 mg/L**	**0.07 mg/L**	**0.08 mg/L**	**1**	**Storm Water Runoff**
pH	Minimum **7.8 S.U.**	Maximum **7.8 S.U.**	Minimum **7.8 S.U.**	Maximum **7.8 S.U.**	**1**	**Storm Water Runoff**

Part B- List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under and existing NPDES permit). Complete one t

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		Sources of Pollutants
TRC	**<0.1 mg/L**	**N/A**	**<0.1 mg/L**	**N/A**	**1**	**Storm Water Runoff**

Continue on Reverse

Continued from the Front

Part C- List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	**Outfall 004** Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
N/A						

Part D- Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*	7. Season sample was taken	8. Form of Precipitation *(rainfall, snowmelt)*
8/26/2008	2,160 minutes	1.12"	~294 hours	N/A*	N/A*	Summer	Rain

9. Provide a description of the method of flow measurement or estimate

*Outfall 004 was deemed substantially similar to Outfall 005 by DEQ letter dated September 10, 2003. As such, data from Outfall 005 monitoring was reported for this outfall. Flow measurements were not made for this outfall.

EPA ID Number *(copy from Item 1 of Form 1)*
VA0060844

Form Approved.
OMB No. 2040-0086.
Approval expires 8-31-98.

VII. Discharge Information *(Continued form page 3 of Form 2F)*

Part A- You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	**Outfall 005**
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		Sources of Pollutants
Oil and Grease	**<10 mg/L**	**N/A**	**<10 mg/L**	**N/A**	**1**	**Storm Water Runoff**
Biological Oxygen Demand (BOD5)	**<2 mg/L**	**<2 mg/L**	**<2 mg/L**	**<2 mg/L**	**1**	**Storm Water Runoff**
Chemical Oxygen Demand (COD)	**11.4 mg/L**	**<10 mg/L**	**11.4 mg/L**	**<10 mg/L**	**1**	**Storm Water Runoff**
Total Suspended Solids (TSS)	**5.4 mg/L**	**15.6 mg/L**	**5.4 mg/L**	**15.6 mg/L**	**1**	**Storm Water Runoff**
Total Kjeldahl Nitrogen	**0.3 mg/L**	**0.4 mg/L**	**0.3 mg/L**	**0.4 mg/L**	**1**	**Storm Water Runoff**
Nitrate plus Nitrite Nitrogen	**<0.1 mg/L**	**<0.1 mg/L**	**<0.1 mg/L**	**<0.1 mg/L**	**1**	**Storm Water Runoff**
Total Phosphorus	**0.07 mg/L**	**0.08 mg/L**	**0.07 mg/L**	**0.08 mg/L**	**1**	**Storm Water Runoff**
pH	Minimum **7.8 S.U.**	Maximum **7.8 S.U.**	Minimum **7.8 S.U.**	Maximum **7.8 S.U.**	**1**	**Storm Water Runoff**

Part B- List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under and existing NPDES permit). Complete one t

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		Sources of Pollutants
TRC	**<0.1 mg/L**	**N/A**	**<0.1 mg/L**	**N/A**	**1**	**Storm Water Runoff**

Continued from the Front

Part C- List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	**Outfall 005**
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		Sources of Pollutants
N/A						

Part D- Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*	7. Season sample was taken	8. Form of Precipitation *(rainfall, snowmelt)*
8/26/2008	**2,160 minutes**	**1.12"**	**~294 hours**	**1 gallon/minute**	**1,080 gallons**	**Summer**	**Rain**

9. Provide a description of the method of flow measurement or estimate

Estimated based on depth in channel.

EPA ID Number *(copy from Item 1 of Form 1)*

VA0060844

Form Approved.
OMB No. 2040-0086.
Approval expires 8-31-98.

VII. Discharge Information *(Continued form page 3 of Form 2F)*

Part A- You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	**Outfall 006** Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
Oil and Grease	<10 mg/L	N/A	<10 mg/L	N/A	1	Storm Water Runoff
Biological Oxygen Demand (BOD5)	<2 mg/L	<2 mg/L	<2 mg/L	<2 mg/L	1	Storm Water Runoff
Chemical Oxygen Demand (COD)	14.3 mg/L	23.1 mg/L	14.3 mg/L	23.1 mg/L	1	Storm Water Runoff
Total Suspended Solids (TSS)	1.5 mg/L	17.9 mg/L	1.5 mg/L	17.9 mg/L	1	Storm Water Runoff
Total Kjeldahl Nitrogen	<0.2 mg/L	<0.2 mg/L	<0.2 mg/L	<0.2 mg/L	1	Storm Water Runoff
Nitrate plus Nitrite Nitrogen	<0.1 mg/L	0.11 mg/L	<0.1 mg/L	0.11 mg/L	1	Storm Water Runoff
Total Phosphorus	<0.05 mg/L	<0.05 mg/L	<0.05 mg/L	<0.05 mg/L	1	Storm Water Runoff
pH	Minimum 7.8 S.U.	Maximum 7.8 S.U.	Minimum 7.8 S.U.	Maximum 7.8 S.U.	1	Storm Water Runoff

Part B- List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under and existing NPDES permit). Complete one t

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
TRC	<0.1 mg/L	N/A	<0.1 mg/L	N/A	1	Storm Water Runoff

Continued from the Front

Part C- List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	**Outfall 006** Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
N/A						

Part D- Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*	7. Season sample was taken	8. Form of Precipitation *(rainfall, snowmelt)*
8/26/2008	2,160 minutes	1.12"	~294 hours	2 gallons/minute	2,160 gallons	Summer	Rain

9. Provide a description of the method of flow measurement or estimate

Estimated based on depth in channel.

VII. Discharge Information *(Continued form page 3 of Form 2F)*

Part A- You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	**Outfall 007**
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		Sources of Pollutants
Oil and Grease	**<10 mg/L**	**N/A**	**<10 mg/L**	**N/A**	**1**	**Storm Water Runoff**
Biological Oxygen Demand (BOD5)	**<2 mg/L**	**<2 mg/L**	**<2 mg/L**	**<2 mg/L**	**1**	**Storm Water Runoff**
Chemical Oxygen Demand (COD)	**23.9 mg/L**	**15.4 mg/L**	**23.9 mg/L**	**15.4 mg/L**	**1**	**Storm Water Runoff**
Total Suspended Solids (TSS)	**12.7 mg/L**	**3.1 mg/L**	**12.7 mg/L**	**3.1 mg/L**	**1**	**Storm Water Runoff**
Total Kjeldahl Nitrogen	**0.9 mg/L**	**0.7 mg/L**	**0.9 mg/L**	**0.7 mg/L**	**1**	**Storm Water Runoff**
Nitrate plus Nitrite Nitrogen	**0.78 mg/L**	**0.99 mg/L**	**0.78 mg/L**	**0.99 mg/L**	**1**	**Storm Water Runoff**
Total Phosphorus	**0.11 mg/L**	**0.09 mg/L**	**0.11 mg/L**	**0.09 mg/L**	**1**	**Storm Water Runoff**
pH	Minimum **7.5 S.U.**	Maximum **7.5 S.U.**	Minimum **7.5 S.U.**	Maximum **7.5 S.U.**	**1**	**Storm Water Runoff**

Part B- List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under and existing NPDES permit). Complete one t

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		Sources of Pollutants
TRC	**<0.1 mg/L**	**N/A**	**<0.1 mg/L**	**N/A**	**1**	**Storm Water Runoff**

Continue on Reverse

Continued from the Front

Part C- List each pollutant shown in Tables 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	**Outfall 007** Sources of Pollutants
	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-weighted Composite		
N/A						

Part D- Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*	7. Season sample was taken	8. Form of Precipitation *(rainfall, snowmelt)*
8/26/2008	2,160 minutes	1.12"	~294 hours	2 gallons/minute	2,160 gallons	Summer	Rain

9. Provide a description of the method of flow measurement or estimate

Estimated based on depth in channel.

VPDES PERMIT APPLICATION ADDENDUM – SUPPLEMENTARY INFORMATION

A. General Information

1. Entity to whom the permit is to be issued: **Blacksburg-VPI Sanitation Authority**
   Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. Classify the discharge as one of the following by checking the appropriate line:

   X a. Existing discharge

   _____ b. Proposed discharge

   _____ c. Proposed expansion of an existing discharge

B. Location

1. Is this facility located within city or town boundaries? Y /(N)

2. (New Issuances & Modifications Only) What is the tax map parcel number for the land where this facility is located? **N/A**

3. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? **0**

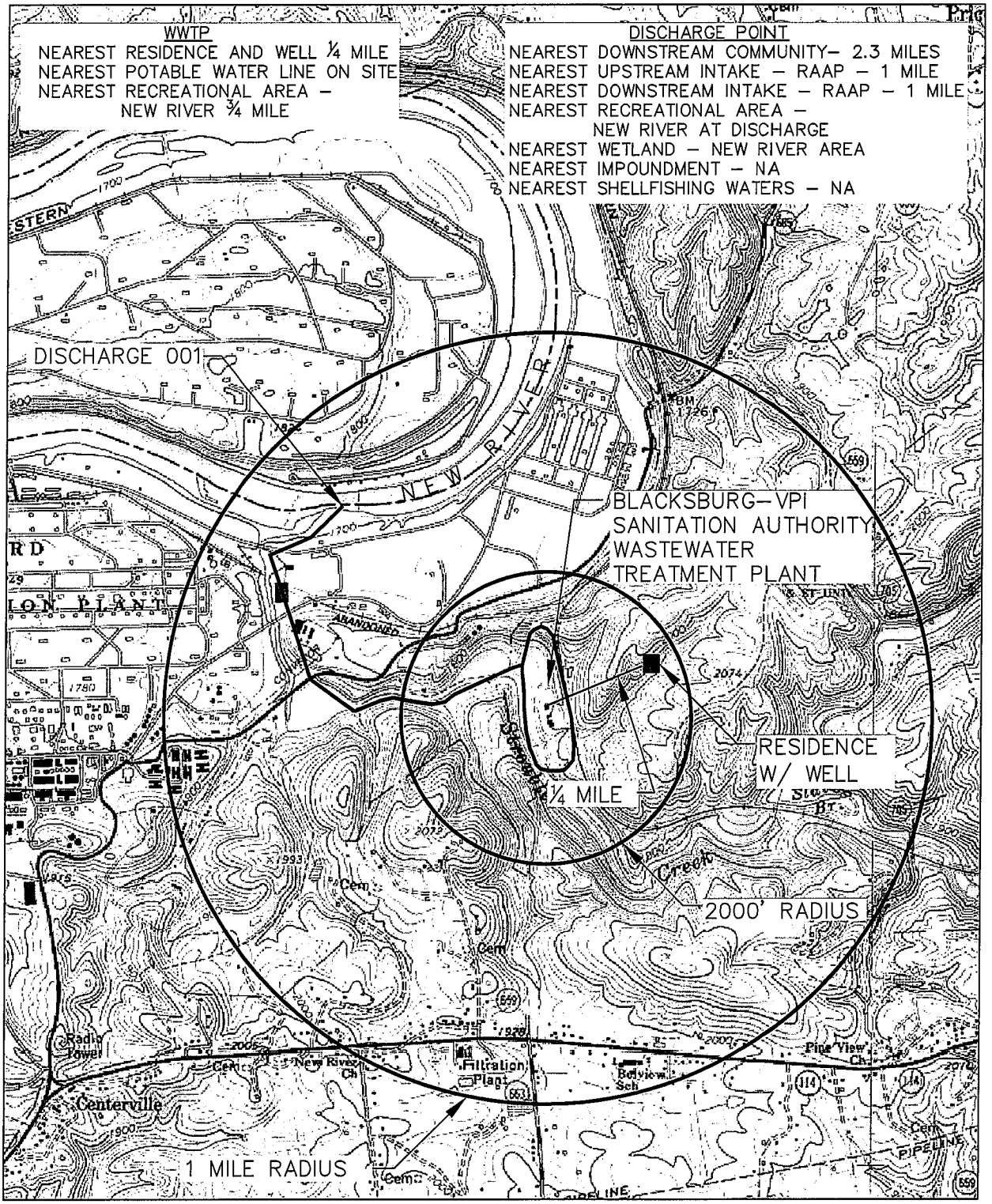
4. What is the total acreage of the property on which the treatment plant is located? **93** Acres

5. Give the minimum elevation of the treatment plant site. **1738** feet

6. Flood elevations of the treatment plant site:
   25 year flood **1740** feet
   100 year flood **1742** feet

7. Attach to the back of this application a location map(s) which may be traced from or is/are a production of a U.S. Geological Survey topographic quadrangle(s) or other appropriately scaled contour map(s). The location map(s) shall show the following: **See attached map**

   a. Treatment Plant
   b. Discharge point
   c. Receiving waters
   d. Boundaries of the property on which the treatment plant is located, or to be located.
   e. Distance from the treatment plant to the nearest: (Indicate "not applicable" for any distance greater than 2000 feet)
      ii. Residence
      iii. Distribution line for potable water supply
      iv. Reservoir, well, or other source of water supply
      v. Recreational area
   f. Distance from the discharge point to the nearest (Indicate "not applicable" for any distance greater than 15 miles)
      ii. Downstream community
      iii. Upstream and downstream water intake points
      iv. Shellfishing waters
      v. Wetlands area
      vi. Downstream impoundment
      vii. Downstream recreational area



MAP TAKEN FROM NATIONAL GEOGRAPHIC TOPO, BLACKSBURG, VIRGINIA

BLACKSBURG – VPI SANITATION AUTHORITY
VPDES PERMIT APPLICATION – ADDENDUM
SITE LOCATION MAP

FIGURE 1

SCALE: 1=2000'
JOB NO.:10729.03

SEPT 2008
\Fig 1.dwg

OLVER INCORPORATED

I:\Dwg\...\10729.03\Archive\Fig 1.dwg, Fig 1-Addendum, 10/2/2008 11:42:18 AM, rholt

C. Discharge Description

1. Provide a brief description of the wastewater treatment scheme. Also, attach to the back of this application, a process flow diagram showing each process unit of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system.

Wastewater treatment consists of the following: mechanical screen and pump station; aerated grit chamber; primary settling with grease removal; activated sludge nitrification/denitrification; secondary clarification; chlorination; dechlorination; sludge thickening with dissolved air floatation; sludge dewatering with centrifuge; sludge incineration; and ash disposal.

See attached schematic drawing.

2. What is the design average flow of this facility? **9** MGD
Industrial facilities: What is the max. 30-day avg. production level (include units)? **N/A**

3. In addition to the above design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y /(N)

If "Yes", please specify the other flow tiers (in MGD) or production levels:_____
Please consider: Is your facility's design flow considerably greater than your current flow? Do you plan to expand operations during the next five years?

4. Nature of operations generating wastewater:
N/A – Treatment of domestic, commercial and industrial wastewater

83 % of flow from domestic connections/sources
Number of private residences to be served by the wastewater treatment facilities:
_____0 _____1-49 **X** 50 or more

17 % of flow from non-domestic connections/sources

5. Mode of discharge: **X** Continuous ___Intermittent ___Seasonal
Describe frequency and duration of intermittent or seasonal discharges:
N/A

6. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:
X Permanent stream, never dry
__Intermittent stream, usually flowing, sometimes dry
__Ephemeral stream, wet-weather flow, often dry
__Effluent-dependent stream, usually or always dry
__Lake or pond at or below the discharge point
__Other:_____

D. Anticipated Phasing Schedule for Plant Capacity – Proposed / Expanding Discharges **N/A**

If this application is for a proposed or expanded discharge(s), complete the phasing schedule below beginning with the year in which construction completion is anticipated and progressing in increments of 5 years for 30 years thereafter.

Proposed Design Capacity: _____ MGD

Anticipated Date of Construction Completion: _____, _____
Month Year

Years after Completion	Projected Flow (MGD)
0	
5	
10	
15	
20	
25	
30	

E. Interim Facilities

Are the wastewater treatment facilities interim? (designed for a useful life of less than 5 years)

_____ Yes __X__ No

If so, provide the estimated date to be discontinued (month, year) _____, and the name and location of the intended replacement facility.

_____
Name / Location

F. List of Materials Stored at the Facility (i.e. chemicals, petroleum products)

Material	Amount (monthly avg)	Stored Location
Chlorine	**6 tons**	**Chlorinator Building**
Sulfur Dioxide	**4 tons**	**Sulfur Dioxide Building**
Fuel Oil	**~20,000 gallons**	**Adjacent to Solids Handling Building and Electrical Distribution Building**
Propane (LPG)	**30 gallons**	**Adjacent to Solids Handling Building**
Polymer	**4,000 pounds**	**Solids Handling Building**
Lubricants and Oils	**1,000 gallons**	**Control Building/Workshop**
Miscellaneous chemicals	**Varies**	**Laboratory**

FACILITY NAME: Lower Stroubles Creek Wastewater Treatment Plant VPDES PERMIT NUMBER:VA0060844

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Will this facility generate sewage sludge? X Yes _No

   Will this facility derive a material from sewage sludge? __Yes X No

   If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge).

3. Will this facility apply sewage sludge to the land? __Yes X No

   Will sewage sludge from this facility be applied to the land? __Yes X No

   If you answered No to both questions above, skip Section C.

   If you answered Yes to either, answer the following three questions:

   a. Will the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions?
   __Yes __No

   b. Will sewage sludge from this facility be placed in a bag or other container for sale or give-away for application to the land? __Yes __No

   c. Will sewage sludge from this facility be sent to another facility for treatment or blending? __Yes __No

   If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

   If you answered Yes to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? __Yes X No

   If Yes, complete Section D (Surface Disposal).

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

1. Facility Information.
   a. Facility name: **Lower Stroubles Creek Wastewater Treatment Plant**
   b. Contact person: **Michael Vaught**
      Title: **Executive Director**
      Phone: **(540) 552-6940**
   c. Mailing address:
      Street or P.O. Box: **P.O. Box 52**
      City or Town: **Blacksburg** State: **Virginia** Zip: **24060**
   d. Facility location:
      Street or Route #: **5277 Prices Fork Road**
      County: **Montgomery County**
      City or Town: **Blacksburg** State: **Virginia** Zip: **24060**
   e. Is this facility a Class I sludge management facility? X Yes ___No
   f. Facility design flow rate: 9 mgd
   g. Total population served:
   h. Indicate the type of facility:
      X Publicly owned treatment works (POTW)
      ___ Privately owned treatment works
      ___ Federally owned treatment works
      ___ Blending or treatment operation
      ___ Surface disposal site
      ___ Other (describe):

2. Applicant Information. If the applicant is different from the above, provide the following:
   a. Applicant name: **same as above**
   b. Mailing address:
      Street or P.O. Box:
      City or Town: _____ State: _____ Zip:
   c. Contact person:
      Title:
      Phone: ( )
   d. Is the applicant the owner or operator (or both) of this facility?
      _____owner _____ operator
   e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one)
      _____ facility _____ applicant

3. Permit Information.
   a. Facility's VPDES permit number (if applicable): **VA0060844**
   b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:

Permit Number:	Type of Permit:
VAL060844	**EPA Sludge**
20911	**DEQ Operating Air Permit**

4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? ___Yes X No If yes, describe:

5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility: **See attached map**
   a. Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
   b. Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.

6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction. **See attached flow schematic**

7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? __Yes _X_No
   If yes, provide the following for each contractor (attach additional pages if necessary).
   Name:
   Mailing address:
   Street or P.O. Box:
   City or Town: _____ State: _____ Zip:
   Phone: ( )
   Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:

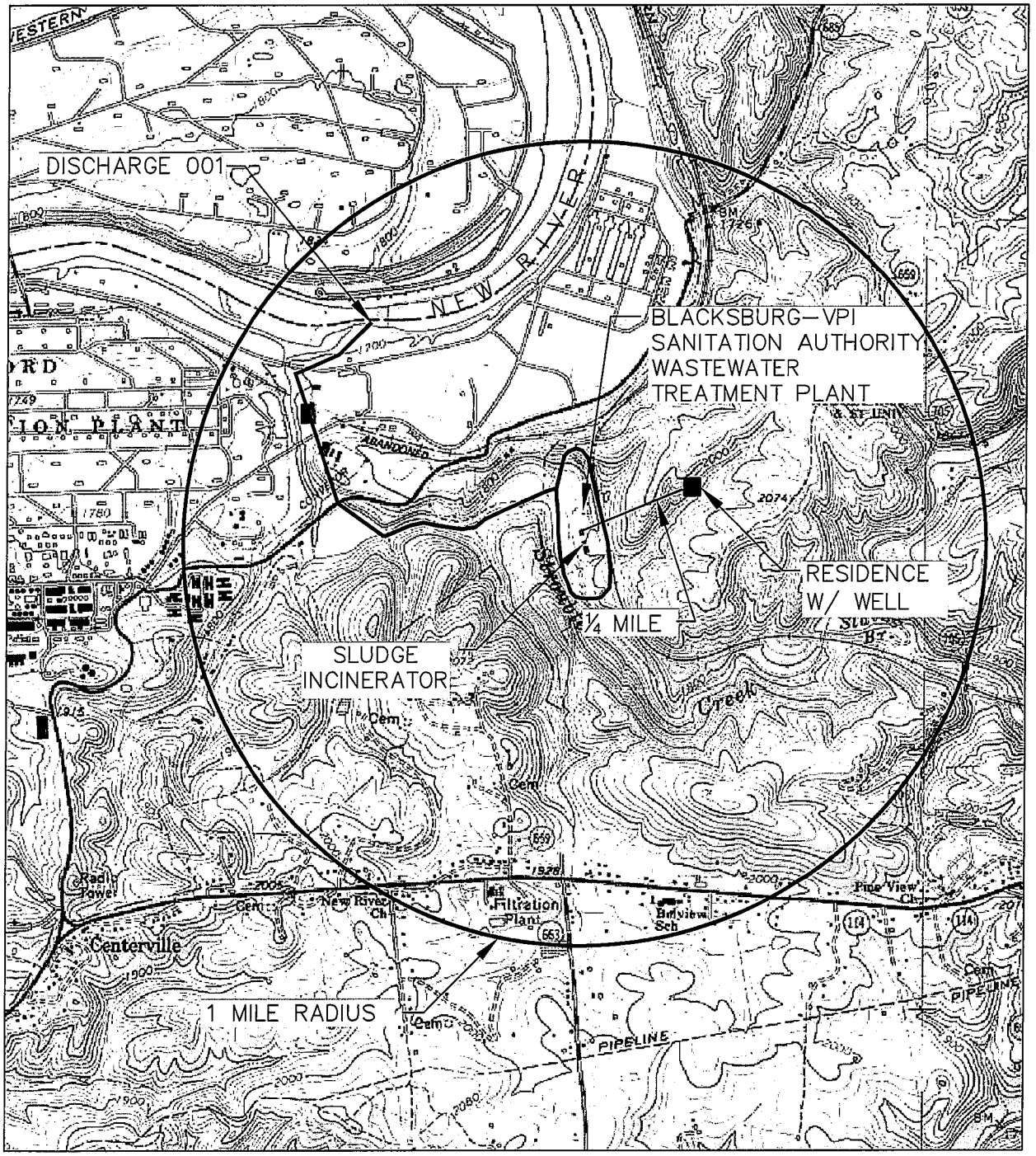
   If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).

8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old. **Not applicable – sludge is incinerated**

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic				
Cadmium				
Chromium				
Copper				
Lead				
Mercury				
Molybdenum				
Nickel				
Selenium				
Zinc				

9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:

   _X_ Section A (General Information)
   _X_ Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)
   ____ Section C (Land Application of Bulk Sewage Sludge)
   ____ Section D (Surface Disposal)



MAP TAKEN FROM NATIONAL GEOGRAPHIC TOPO, BLACKSBURG, VIRGINIA

BLACKSBURG – VPI SANITATION AUTHORITY
VPDES PERMIT APPLICATION – SEWAGE SLUDGE
SITE LOCATION MAP

FIGURE 1

SCALE: 1=2000'
JOB NO.:10729.03

SEPT 2008
\Fig 1.dwg

OLVER INCORPORATED

I:\Dwg\...\10729.03\Archive\Fig 1.dwg, Fig 1-Sewage Sludge, 10/2/2008 11:40:35 AM, rholt

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title **Michael Vaught, Executive Director**

Signature Michael E. Vaught Date Signed 10/06/2008

Telephone number **(540) 552-6940**

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

FACILITY NAME: Lower Stroubles Creek Wastewater Treatment Plant VPDES PERMIT NUMBER: VA0060844

SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. Amount Generated On Site.
   Total dry metric tons per 365-day period generated at your facility: **965.4** dry metric tons

2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary. **N/A**
   a. Facility name:
   b. Contact Person:
      Title:
      Phone ( )
   c. Mailing address:
      Street or P.O. Box:
      City or Town:_____ State:_____ Zip:
   d. Facility Address:
      (not P.O. Box)
   e. Total dry metric tons per 365-day period received from this facility:_____ dry metric tons
   f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:

3. Treatment Provided at Your Facility.
   a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?
      __Class A __Class B _X_Neither or unknown
   b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: **Incineration**

   c. Which vector attraction reduction option is met for the sewage sludge at your facility?
      ___ Option 1 (Minimum 38 percent reduction in volatile solids)
      ___ Option 2 (Anaerobic process, with bench-scale demonstration)
      ___ Option 3 (Aerobic process, with bench-scale demonstration)
      ___ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
      ___ Option 5 (Aerobic processes plus raised temperature)
      ___ Option 6 (Raise pH to 12 and retain at 11.5)
      ___ Option 7 (75 percent solids with no unstabilized solids)
      ___ Option 8 (90 percent solids with unstabilized solids)
      _X_ None or unknown **(Incinerated)**

   d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: **None**

   e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: **None**

4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge). **N/A**
   (If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)
   a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:
      _____0_____ dry metric tons
   b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?
      __Yes _X_No

5. Sale or Give-Away in a Bag or Other Container for Application to the Land. **N/A**

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land:_____ dry metric tons

b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

6. Shipment Off Site for Treatment or Blending. **N/A**

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

a. Receiving facility name:

b. Facility contact:
Title:
Phone: ( )

c. Mailing address:
Street or P.O. Box:
City or Town:_____ State:_____ Zip:

d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: _____ dry metric tons

e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:

Permit Number:	Type of Permit:
_____	
_____	

f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? __Yes __No
Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?
__Class A __Class B __Neither or unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge:

g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? __Yes __No
Which vector attraction reduction option is met for the sewage sludge at the receiving facility?
__ Option 1 (Minimum 38 percent reduction in volatile solids)
__ Option 2 (Anaerobic process, with bench-scale demonstration)
__ Option 3 (Aerobic process, with bench-scale demonstration)
__ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
__ Option 5 (Aerobic processes plus raised temperature)
__ Option 6 (Raise pH to 12 and retain at 11.5)
__ Option 7 (75 percent solids with no unstabilized solids)
__ Option 8 (90 percent solids with unstabilized solids)
__ None unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge:

h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?
__Yes __No
If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:

i. If you answered yes to f., g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.

j Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? ___Yes ___No
If yes, provide a copy of all labels or notices that accompany the product being sold or given away.

k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? ___ Yes ___ No. If no, provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.
Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported.

7. Land Application of Bulk Sewage Sludge. **N/A**

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6; complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites:_____dry metric tons

b. Do you identify all land application sites in Section C of this application? ___Yes ___No
If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).

c. Are any land application sites located in States other than Virginia? ___Yes ___No
If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.

d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

8. Surface Disposal. **N/A**

(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)

a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: _____ dry metric tons

b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?
___Yes ___No
If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.

c. Site name or number:

d. Contact person:
Title:
Phone: ( )
Contact is: ___Site Owner ___Site operator

e. Mailing address.
Street or P.O. Box:
City or Town:_____ State:_____ Zip:

f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: _____ dry metric tons

g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:

Permit Number:	Type of Permit:
_____	
_____	

9. Incineration.

(Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)

a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: **965.4** dry metric tons

b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?
__X__ Yes ___No
If no, answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.

c. Incinerator name or number:

d. Contact person:
Title:
Phone: ( )
Contact is: ___Incinerator Owner ___Incinerator Operator

e. Mailing address.
Street or P.O. Box:
City or Town:_____ State:_____ Zip:

f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: _____ dry metric tons

g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing of sewage sludge at this incinerator:

Permit Number:	Type of Permit:
_____	
_____	

10. Disposal in a Municipal Solid Waste Landfill.

(Complete Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.)

a. Landfill name: **New River Resource Authority**

b. Contact person: **Joe Levine, P.E.**
Title: **Executive Director**
Phone: **540-674-1677**
Contact is: __X__Landfill Owner ___Landfill Operator

c. Mailing address.
Street or P.O. Box: **P.O. Box 1246**
City or Town: **Dublin** State: **VA** Zip: **24084**

d. Landfill location.
Street or Route #: **7100 Cloyd's Mountain Road**
County: **Pulaski**
City or Town: **Dublin** State: **VA** Zip: **24084**

e. Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:
Variable-landfill used only as a back-up to incineration dry metric tons

f. List on this form or an attachment, the numbers of all federal, state or local permits that regulate the operation of this municipal solid waste landfill:

Permit Number:	Type of Permit:
548	**VA – DEQ Solid Waste Landfill**
_____	

g. Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?
__X__Yes ___No

h. Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid Waste Management Regulation, 9 VAC 20-80-10 et seq.? __X__Yes ___No

i. Will the vehicle bed or other container used to transport sewage sludge to the municipal solid waste landfill be watertight and covered?__X__Yes ___ No
Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the week and time of the day sewage sludge will be transported. **See Attached**

Facility Name: **Blacksburg-VPI Sanitation Authority** VPDES Permit Number: **VA0060844**

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM
Section B. Item 10.i.

Days and times sewage sludge is transported: **Sewage sludge is typically incinerated; landfill disposal will only be used as a back-up if the Authority's incinerator is not operational or otherwise available. If landfill disposal is needed, the sludge will typically be transported between 8:00 am – 5:00 pm, Monday – Friday. Sludge will be transported to the New River Resource Authority Cloyd's Mountain Landfill in Dublin, Virginia.**

Haul Route from WWTP to New River Resource Authority Cloyd's Mountain Landfill:
Begin at WWTP on Prices Fork Road
Right on Route 114 to Fairlawn
Right on Route 11 South to Dublin
Right on Route 100
Right on Cloyd's Mountain Road at Landfill

Return Route From Montgomery Regional Solid Waste Authority Transfer Station to WWTP:
Begin at Landfill on Cloyd's Mountain Road
Left on Route 100 to Dublin
Left on Route 11 to Fairlawn
Left on Route 114 to Christiansburg
Left on Prices Fork Road to WWTP

SECTION C. LAND APPLICATION OF BULK SEWAGE SLUDGE

Complete this section for sewage sludge that is land applied unless any of the following conditions apply:
The sewage sludge meets the Table 1 ceiling concentrations, the Table 3 pollutant concentrations, Class A pathogen requirements and one of the vector attraction reduction options 1-8 (fill out B.4 instead) (EQ Sludge); or
The sewage sludge is sold or given away in a bag or other container for application to the land (fill out B.5 instead); or
You provide the sewage sludge to another facility for treatment or blending (fill out B.6 instead).
Complete Section C for every site on which the sewage sludge that you reported in B.7 is land applied.

1. Identification of Land Application Site.
   a. Site name or number:
   b. Site location (Complete i and ii)
      i. Street or Route#:
      County:
      City or Town: _____ State: _____ Zip:
      ii. Latitude:_____ Longitude:
      Method of latitude/longitude determination
      _____ USGS map _____ Filed survey _____ Other
   c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.

2. Owner Information.
   a. Are you the owner of this land application site? __Yes __No
   b. If no, provide the following information about the owner:
      Name:
      Street or P.O. Box:
      City or Town: _____ State:_____ Zip:
      Phone: ( )

3. Applier Information:
   a. Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site? __Yes __No
   b. If no, provide the following information for the person who applies the sewage sludge:
      Name:
      Street or P.O. Box:
      City or Town:_____ State:_____ Zip:
      Phone: ( )
   c. List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the person who applies sewage sludge to this land application site:
      Permit Number: Type of Permit:
      _____
      _____

4. Site Type. Identify the type of land application site from among the following:
   __Agricultural land __Reclamation site __Forest
   __Public contact site __Other. Describe

5. Vector Attraction Reduction.
   Are any vector attraction reduction requirements met when sewage sludge is applied to the land application site?
   ___Yes ___No If yes, answer a and b.
   a. Indicate which vector attraction reduction option is met:
      __ Option 9 (Injection below land surface)
      __ Option 10 (Incorporation into soil within 6 hours)
   b. Describe, on this form or on another sheet of paper, any treatment processes used at the land application site to reduce the vector attraction properties of sewage sludge:

6. Cumulative Loadings and Remaining Allotments.

(Complete Question 6 only if the sewage sludge applied to this site since July 20, 1993 is subject to the cumulative pollutant loading rates (CPLRs) - see instructions.)

a. Have you contacted DEQ or the permitting authority in the state where the sewage sludge subject to the CPLRs will be applied to ascertain whether bulk sewage sludge subject to the CPLRs has been applied to this site since July 20, 1993? ___Yes ___No
If no, sewage sludge subject to the CPLRs may not be applied to this site.
If yes, provide the following information:
Permitting authority:
Contact person:
Phone:( )

b. Based upon this inquiry, has bulk sewage sludge subject to the CPLRs been applied to this site since July 20, 1993? ___Yes ___No If no, skip the rest of Question 6. If yes, answer questions c - e.

c. Site size, in hectares: _____ (one hectare = 2.471 acres)

d. Provide the following information for every facility other than yours that is sending or has sent sewage sludge subject to the CPLRs to this site since July 20, 1993. If more than one such facility sends sewage sludge to this site, attach additional pages as necessary.
Facility name:
Facility contact:
Title:
Phone: ( )
Mailing address.
Street or P.O. Box:
City or Town:_____ State:_____ Zip:

e. Provide the total loading and allotment remaining, in kg/hectare, for each of the following pollutants:

	Cumulative loading	Allotment remaining
Arsenic	_____	
Cadmium	_____	
Copper	_____	
Lead	_____	
Mercury	_____	
Nickel	_____	
Selenium	_____	
Zinc	_____	

Complete Questions 7-12 below only if you apply sewage sludge, or you are responsible for land application of sewage sludge. Information required by these questions may be prepared as attachments to this form. Skip the following questions if you contract land application to someone else (as indicated under Section A.7) who is responsible for the operation.

7. Sludge Characterization. Use the table below or a separate attachment, provide at least one analysis for each parameter.

PCBs (mg/kg)
pH (S. U.)
Percent Solids (%)
Ammonium Nitrogen (mg/kg)
Nitrate Nitrogen (mg/kg)
Total Kjeldahl Nitrogen (mg/kg)
Total Phosphorus (mg/kg)
Total Potassium (mg/kg)
Alkalinity as $CaCO_3$* (mg/kg)

* Lime treated sludge (10% or more lime by dry weight) should be analyzed for percent $CaCO_3$.

8. Storage Requirements.

Existing and proposed sludge storage facilities must provide an estimated annual sludge balance on a monthly basis incorporating such factors as storage capacity, sludge production and land application schedule. Include pertinent calculations justifying storage requirements.

Proposed sludge storage facilities must also provide the following information:

a. A sludge storage site layout on a 7.5 minute topographic quadrangle or other appropriate scaled map to show the following topographic features of the surrounding landscape to a distance of 0.25 mile. Clearly mark the property line.
   1) Water wells, abandoned or operating
   2) Surface waters
   3) Springs
   4) Public water supply(s)
   5) Sinkholes
   6) Underground and/or surface mines
   7) Mine pool (or other) surface water discharge points
   8) Mining spoil piles and mine dumps
   9) Quarry(s)
   10) Sand and gravel pits
   11) Gas and oil wells
   12) Diversion ditch(s)
   13) Agricultural drainage ditch(s)
   14) Occupied dwellings, including industrial and commercial establishments
   15) Landfills or dumps
   16) Other unlined impoundments
   17) Septic tanks and drainfields
   18) Injection wells
   19) Rock outcrops

b. A topographic map of sufficient detail to clearly show the following information:
   1) Maximum and minimum percent slopes
   2) Depressions on the site that may collect water
   3) Drainageways that may attribute to rainfall run-on to or runoff from this site
   4) Portions of the site (if any) which are located with the 100-year floodplain and how the storage facility will be protected from flooding

c. Data and specifications for the storage facility lining material.

d. Plan and cross-sectional views of the storage facility.

e. Depth from the bottom of the storage facility to the seasonal high water table and separation distance to the permanent water table.

9. Land Area Requirements. Provide calculations justifying the land area requirements for land application of sewage sludge taking into consideration average soil productivity group, crop(s) to be grown and most limiting factor(s) of the sewage sludge, specifically Plant Available Nitrogen (PAN), Calcium Carbonate Equivalence (CCE), and metal loadings (CPLR sewage sludge only), where applicable. Relate PAN, CCE, and metal loadings to demonstrate the most limiting factor for land application.

10. Landowner Agreement Forms. Provide a properly completed Sewage Sludge Application Agreement Form (attached) for each landowner if sewage sludge is to be applied onto land not owned by the applicant.

11. Ground Water Monitoring.

Are any ground water monitoring data available for this land application site? __Yes __No

If yes, submit the ground water monitoring data with this permit application. Also submit a written description of the well locations, approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.

12. Land Application Site Information.

(Complete Items a-d for sites receiving infrequent application - land application of sewage sludge up to the agronomic rate at a frequency of once in a 3 year period; complete Items a-h for sites receiving frequent application - land application of sewage sludge in excess of 70% the agronomic rate at a frequency greater than once in a 3 year period)

a. Provide a general location map for each county which clearly indicates the location of all the land application sites.

b. For each land application site provide a site plan of sufficient detail to clearly show the concerned landscape features and associated buffer zones (See instructions). Provide a legend for each landscape feature and the net acreage for each field taking into account the proposed buffer zones.

c. In order to ensure that land application of bulk sewage sludge will not impact federally listed threatened or endangered species or federally designated critical habitat, the applicant must notify the field office of the U. S. Department of the Interior, Fish and Wildlife Service (FWS), by a letter, the proposed land application activities with the identification of the land application sites. The address and phone number of FWS are provided below.

U. S. Fish and Wildlife Service
Virginia Field Office
P. O. Box 480
White Marsh, VA 23183
TEL: (804)693-6694

Provide a copy of the notification letter with this application form.

d. Provide a soil survey map, preferably photographically based, with the field boundaries clearly marked. (A USDA-SCS soil survey map should be provided, if available.)
Provide a detailed legend for each soil survey map which uses accepted USDA-SCS descriptions of the typifying pedon for each soil series (soil type). Complex associations may be described as a range of characteristics. Soil descriptions shall include as a minimum the following information.

1) Soil symbol
2) Soil series, textural phase and slope range
3) Depth to seasonal high water table
4) Depth to bedrock
5) Estimated soil productivity group (for the proposed crop rotation)

Item e - h are required for sites receiving frequent application of sewage sludge

e. In order to verify the information provided in item d, characterize the soil at each land application site. Representative soil borings or test pits to a depth of five feet or to bedrock if shallower, are to be coordinated for the typifying pedon of each soil series (soil type). Soil descriptions shall include as a minimum the following information:

1). Soil symbol
2). Soil series, textural phase and slope range
3). Depth to seasonal high water table
4). Depth to bedrock
5). Estimated soil productivity group (for the proposed crop rotation)

f. Collect and analyze soil samples from each field, weighted to best represent each of the soil borings performed for Item e. Using the table below or a separate attachment, provide at least one analysis per sample for each of the following parameters.

Soil Organic Matter (%)
Soil pH (std. units)
Cation Exchange Capacity (meq/100g)
Total Nitrogen (ppm)
Organic Nitrogen (ppm)
Ammonia Nitrogen (ppm)
Nitrate Nitrogen (ppm)
Available Phosphorus (ppm)
Exchangeable Potassium (mg/100g)
Exchangeable Sodium (mg/100g)
Exchangeable Calcium (mg/100g)
Exchangeable Magnesium (mg/100g)
Arsenic (ppm)
Cadmium (ppm)
Copper (ppm)
Lead (ppm)
Mercury (ppm)
Molybdenum (ppm)
Nickel (ppm)
Selenium (ppm)
Zinc (ppm)
Manganese (ppm)
Particle Size Analysis or
USDA Textural Estimate (%)

g. Relate the crop nutrient needs to anticipated yields, soil productivity rating and the various fertilizer or nutrient sources from sludge and chemical fertilizers. Describe any specialized agronomic management practices which may be required as a result of high soil pH. If the sludge is expected to possess an unusually high CCE or other unusual properties, provide a description of any plant tissue testing, supplemental fertilization or intensive agronomic management practices which may be necessary.

h. Using a narrative format and referencing any related charts, describe the proposed cropping system. Show how the crop rotation and management will be coordinated with the design of the land application system. Include any supplemental fertilization program, soil testing and the coordination of tillage practices, planting and harvesting schedules and timing of land application.

SEWAGE SLUDGE APPLICATION AGREEMENT

This sewage sludge application agreement is made on this date _____ between _____, referred to here as "landowner", and _____, referred to here as the "Permittee".

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as _____ ("landowner's land"). Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of sewage sludge on landowner's land in amounts and in a manner authorized by VPDES permit number _____ which is held by the Permittee.

Landowner acknowledges that the appropriate application of sewage sludge will be beneficial in providing fertilizer and soil conditioning to the property. Moreover, landowner acknowledges having been expressly advised that, in order to protect public health, the following site restrictions must be adhered to when sewage sludge receives Class B treatment for pathogen reduction:

1. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge;

2. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for four months or longer prior to incorporation into the soil;

3. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than four months prior to incorporation into the soil;

4. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge;

5. Animals shall not be grazed on the land for 30 days after application of sewage sludge;

6. Turf grown on land where sewage sludge is applied shall not be harvested for one year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the State Water Control Board;

7. Public access to land with a high potential for public exposure shall be restricted for one year after application of sewage sludge;

8. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

9. Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of sewage sludge borne cadmium equal to or exceeding 0.5 kilograms/hectare (0.45 pounds/acre).

Permittee agrees to notify landowner or landowner's designee of the proposed schedule for sewage sludge application and specifically prior to any particular application to landowner's land. This agreement may be terminated by either party upon written notice to the address specified below.

Landowner:	Permittee:
_____	_____
Signature	Signature
_____	_____
Mailing Address	Mailing Address

SECTION D. SURFACE DISPOSAL

Complete this section only if you own or operate a surface disposal site. Provide the information for each active sewage sludge unit.

1. Information on Active Sewage Sludge Units.
   a. Unit name or number:
   b. Unit location
      i. Street or Route#:
      County:
      City or Town: _____ State: _____ Zip:
      ii. Latitude:_____ Longitude:
      Method of latitude/longitude determination
      _____ USGS map _____ Filed survey _____ Other
   c. Topographic map. Provide a topographic map (or other appropriate map if a topographic map is unavailable) that shows the site location.
   d. Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period: _____dry metric tons.
   e. Total dry metric tons of sewage sludge placed on the active sewage sludge unit over the life of the unit: _____ dry metric tons.
   f. Does the active sewage sludge unit have a liner with a minimum hydraulic conductivity of 1×10^{-7}cm/sec? __Yes __No If yes, describe the liner or attach a description.

   g. Does the active sewage sludge unit have a leachate collection system? __Yes __No
   If yes, describe the leachate collection system or attach a description. Also, describe the method used for leachate disposal and provide the numbers of any federal, state or local permits for leachate disposal:

   h. If you answered no to either f or g, answer the following:
   Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site? __Yes __No If yes, provide the actual distance in meters:
   i. Remaining capacity of active sewage sludge unit, in dry metric tons:_____ dry metric tons
   Anticipated closure date for active sewage sludge unit, if known:_____ (MM/DD/YYYY)
   Provide with this application a copy of any closure plan developed for this active sewage sludge unit.

2. Sewage Sludge from Other Facilities.
   Is sewage sludge sent to this active sewage sludge unit from any facilities other than yours? __Yes __No
   If yes, provide the following information for each such facility, attach additional sheets as necessary.
   a. Facility name:
   b. Facility contact:
   Title:
   Phone: ( )
   c. Mailing address.
   Street or P.O. Box:
   City or Town:_____ State:_____ Zip:
   d. List, on this form or an attachment, the facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the facility's sewage sludge management practices:
   Permit Number: Type of Permit:
   _____
   _____
   e. Which class of pathogen reduction is achieved before sewage sludge leaves the other facility?
   __Class A __Class B __Neither or unknown
   f. Describe, on this form or on another sheet of paper, any treatment processes used at the other facility to reduce pathogens in sewage sludge:

g. Which vector attraction reduction option is achieved before sewage sludge leaves the other facility?
___ Option 1 (Minimum 38 percent reduction in volatile solids)
___ Option 2 (Anaerobic process, with bench-scale demonstration)
___ Option 3 (Aerobic process, with bench-scale demonstration)
___ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
___ Option 5 (Aerobic processes plus raised temperature)
___ Option 6 (Raise pH to 12 and retain at 11.5)
___ Option 7 (75 percent solids with no unstabilized solids)
___ Option 8 (90 percent solids with unstabilized solids)
___ None or unknown

h. Describe, on this form or another sheet of paper, any treatment processes used at the other facility to reduce vector attraction properties of sewage sludge:

i. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities performed by the other facility that are not identified in e - h above:

3. Vector Attraction Reduction.

a. Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit?
___ Option 9 (Injection below land surface)
___ Option 10 (Incorporation into soil within 6 hours)
___ Option 11 (Covering active sewage sludge unit daily)

b. Describe, on this form or another sheet of paper, any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge:

4. Ground Water Monitoring.

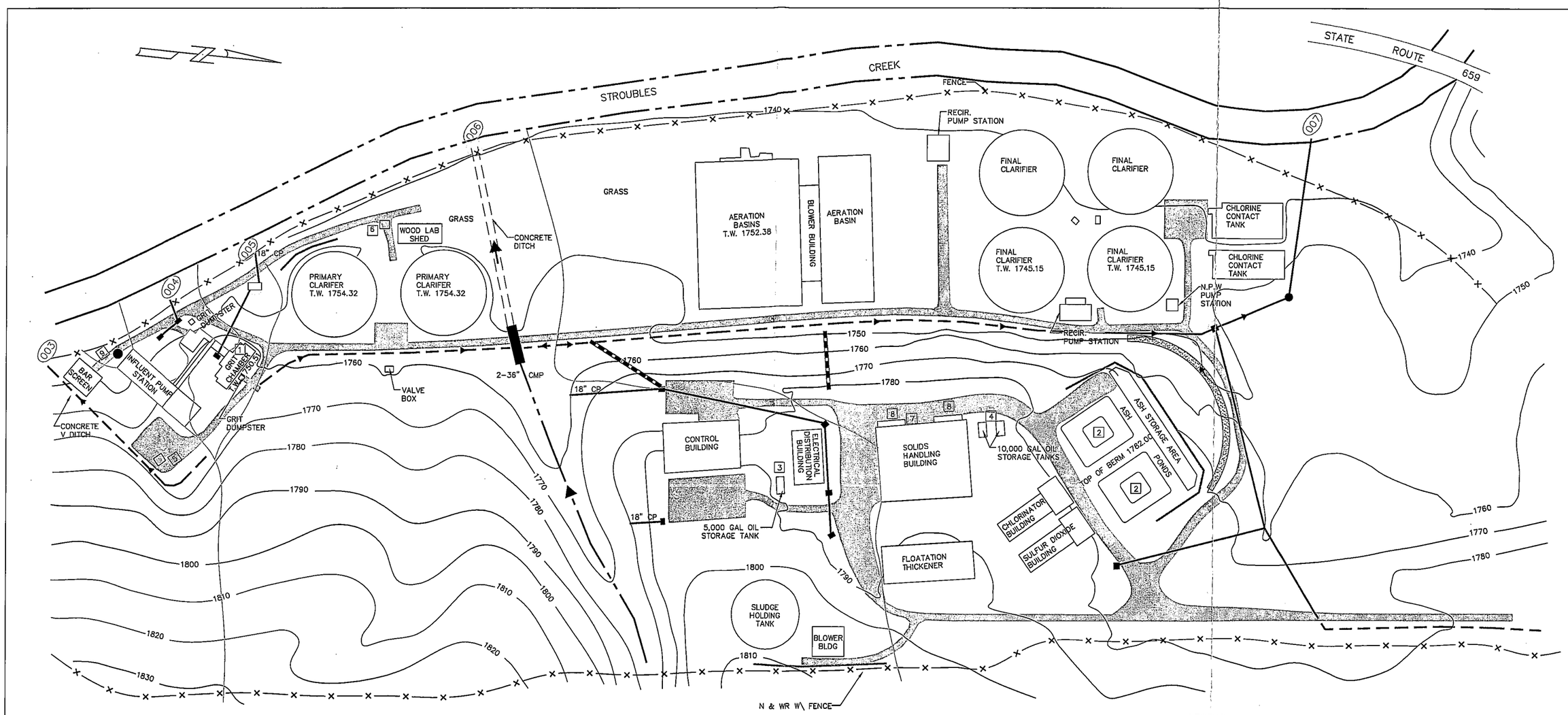
a. Is ground water monitoring currently conducted at this active sewage sludge unit or are ground water monitoring data otherwise available for this active sewage sludge unit? ___Yes ___No
If yes, provide a copy of available ground water monitoring data. Also provide a written description of the well locations, the approximate depth to ground water, and the ground water monitoring procedures used to obtain these data.

b. Has a ground water monitoring program been prepared for this active sewage sludge unit?
___Yes ___No If yes, submit a copy of the ground water monitoring program with this application.

c. Have you obtained a certification from a qualified ground water scientist that the aquifer below the active sewage sludge unit has not been contaminated? ___Yes ___No
If yes, submit a copy of the certification with this application.

5. Site-Specific Limits.

Are you seeking site-specific pollutant limits for the sewage sludge placed on the active sewage sludge unit?
___Yes ___No If yes, submit information to support the request for site-specific pollutant limits with this application.



MAP COPIED FROM
R. STUART ROYER & ASSOCIATES
CONSULTING ENGINEERS
RICHMOND, VIRGINIA

POTENTIAL POLLUTANT SOURCES

1. GRIT SOLIDS HANDLING
2. ASH PONDS
3. 5,000 GALLON OIL TANK
4. 2-10,000 GALLON OIL TANKS
5. SPARE GRIT DUMPSTER
6. GARBAGE DUMPSTER
7. 2 PROPANE CYLINDERS
8. LOADING DOCKS
9. LEACHATE RECEIVING STATION

LEGEND

- DRAINAGE PIPE
- CONCRETE DITCH
- RIPRAP DITCH
- DROP INLET
- MANHOLE
- EXISTING CONTOURS
- FENCE LINE
- RETAINING WALL
- PAVED AREAS
- (001) OUTFALL
- OUTFALL SAMPLING LOCATION
- DRAINAGE AREA BOUNDARY
- NATURAL DRAINAGE CHANNEL
- STAIRS

OLVER INCORPORATED
Consultants and Environmental Engineers
1116 SOUTH MAIN STREET, SUITE 100
BLACKSBURG, VIRGINIA 24060 (540) 552-5548

Designed: KLA
Drawn: KJC
Checked: RLH

Scale: NO SCALE
Job No.: 10729.03
Date: SEPT 08

BLACKSBURG – VPI SANITATION AUTHORITY
STROUBLES CREEK WASTEWATER TREATMENT PLANT

FACILITY SITE MAP

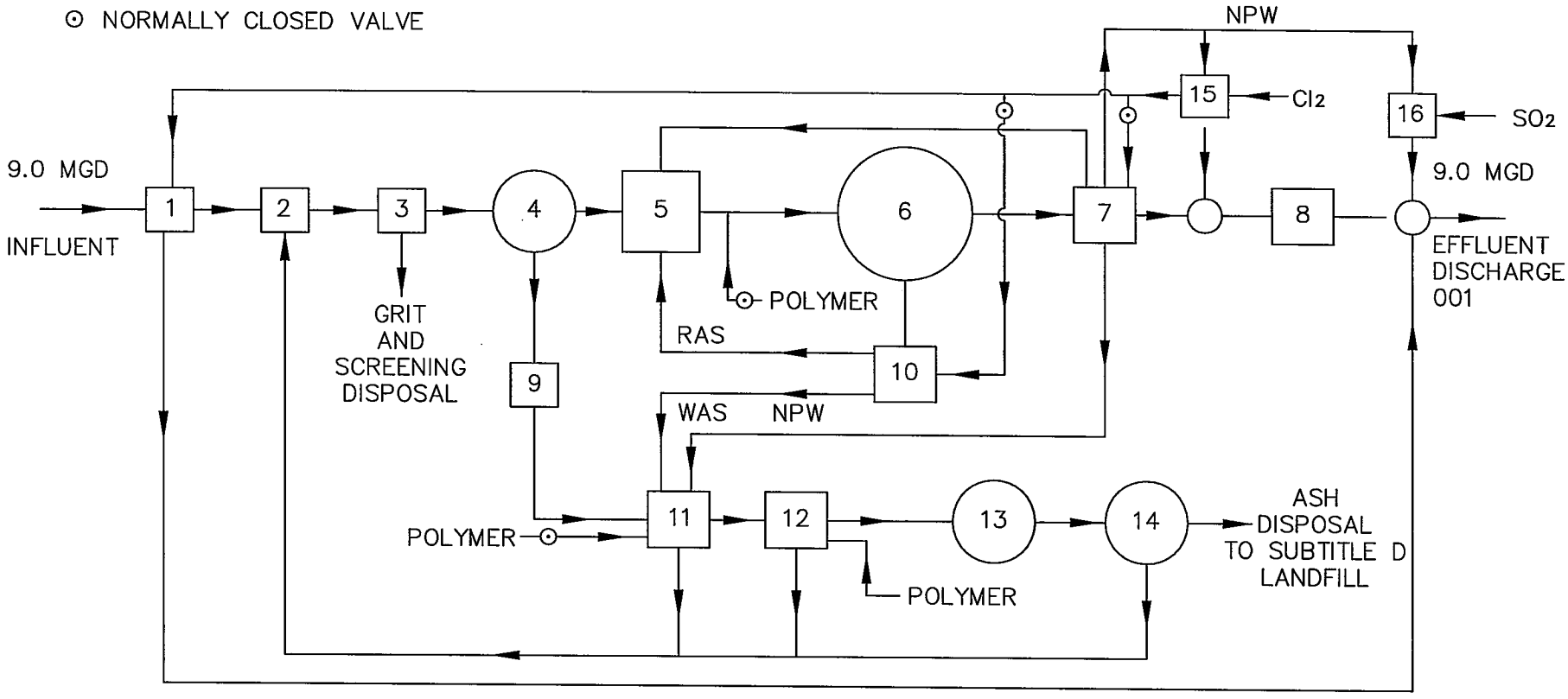
Rev.	Description	Date	By
2	VPDES PERMIT APPLICATION	SEPT-08	RLH
1	DEQ APPROVAL OF OUTFALL CONSOLIDATION	SEPT-03	KLA
0	STORMWATER POLLUTION PREVENTION PLAN	SEPT-02	RLH

Sheet No.: 1

File Name: \BVPISA\10729.03\SITEMAP

1. BAR SCREEN BUILDING
2. SCREW PUMPS & METERING
3. GRIT REMOVAL
4. PRIMARY SETTLING (2)
5. AERATION (3)
6. FINAL SETTLING (4)
7. NON–POTABLE WATER PUMPING
8. CHLORINE CONTACT TANK (3)
9. PRIMARY SLUDGE PUMPING
10. ACTIVATED SLUDGE PUMPING
11. DISSOLVED AIR FLOTATION (3)
12. CENTRIFUGE
13. INCINERATION
14. ASH PONDS
15. CHLORINATION BUILDING
16. SULFUR DIOXIDE BUILDING

⊙ NORMALLY CLOSED VALVE



BLACKSBURG – VPI SANITATION AUTHORITY
LOWER STROUBLES CREEK WASTEWATER TREATMENT PLANT
SCHEMATIC FLOW DIAGRAM

FIGURE 2

SCALE: NO SCALE
JOB NO.: 10729.03

SEPT 2008
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